

Antiquity

A Quarterly Review of Archaeology

VOL. VIII No. 32

DECEMBER 1934

Editorial Notes

THE archaeology of Great Britain is now an active and flourishing pursuit, with a growing number of students devoting all or most of their time to it. Like any other branch of science it needs an *apparatus*, and it is therefore opportune to take stock of the existing state of affairs.



The chief units in the organization of research are usually the learned societies devoted to its advancement. They provide a forum for the promulgation of new discoveries and ideas, and set a standard of achievement. Membership is usually open to all serious students, and to any others willing to pay the annual subscription. Societies publish journals and memoirs, form libraries for their members, and accumulate funds which are of course indispensable for conducting excavations or any other form of research. The less spectacular but equally necessary bibliographies and annual summaries of work done have not in the past received adequate attention. We have had (since Professor Haverfield began it in 1910) a series of admirable annual reports on Roman Britain, published by the Society for the Promotion of Roman Studies. The Congress of Archaeological Societies publishes an annual statement that has evolved from the old and valuable Earthworks Reports. But these publications, all excellent in their way, do not quite cover all the ground.

ANTIQUITY

It is therefore good to know that the Royal Archaeological Institute is publishing a classified list of the year's publications. This appears in the Institute's annual volume, the *ARCHAEOLOGICAL JOURNAL*, now in its 80th year; and we understand that *separata* are not being broadcast. It is of course quite a reasonable demand that those who would profit by the Institute's enterprise should become members, or at least buy the *JOURNAL*. (Members of the something-for-nothing brigade are well known in the offices of *ANTIQUITY*).



A parallel and complementary task has been begun by the Prehistoric Society of East Anglia—a society which, we are told, 'is the oldest and only large society in Great Britain specially devoted to the study of prehistory'. It consists of notes on excavations in England, Scotland and Wales during the preceding year, classified chronologically, and is compiled by Dr Grahame Clark the Editor (England), Professor Gordon Childe (Scotland) and Mr W. F. Grimes (Wales). The current issue occupies nine pages of the Society's seventh volume of *Proceedings*, for 1933. We have already attempted to do something like this in *ANTIQUITY* but only in a rather scrappy and disjointed way; it is a task more for a society rather than for a free-lance journal.



Logical minds may inquire why three nation-wide societies are needed; whether all would not gain by amalgamation? The question is of no practical import and therefore purely academic. We admit to sympathy with the idea, but as realists we must also admit that the existing English system has counterbalancing advantages. The undertakings described above could never have been initiated by a single autocratic society; more probably they would have been smothered at birth by it. Too much logic often kills initiative and retards progress; we have only to cross the Channel to see that. Societies keep archaeology alive and keep it interesting; and there is plenty of room for those which exist.

EDITORIAL NOTES

The excavation season has not passed without the usual demands for sites to be left uncovered. The problem is one which must be considered in relation to the circumstances of each particular case. The task of re-burying a ziggurat or even a Cretan palace is so immense that to attempt it would be to divert to a negative purpose a very considerable proportion of the comparatively scanty funds at present available for archaeological discovery.



On the other hand, to attempt, as Sir Arthur Evans has bravely attempted at the Minoan Palace of Knossos in Crete, to preserve the ancient fabric by systematic reconstruction and protection is again an extremely costly policy, and is moreover one which is peculiarly liable to abuse. Reconstruction almost necessarily involves a certain element of guess-work which will permanently detract from the scientific interest of the restored monument.



If we turn to archaeological excavations in this country the problem is the same in kind if not in degree. The Office of Works, after many years of laborious experiment, has brought nearer to perfection than ever before the art of consolidating an ancient structure. But this work is not only costly at the outset, but its permanency is to some extent contingent upon continuous supervision year in and year out. Up and down the countryside are many gloomy instances of excavated foundations of Roman and Medieval buildings which, inadequately protected from the ravages of frost, vegetation, and other interference, have lost by exposure far more than they have added thereby to knowledge.



Generally speaking, it is far safer—particularly after the necessarily destructive methods of modern scientific excavation—to re-bury excavated foundations unless they are (*a*) unusually complete or instructive, and (*b*) on that account sufficiently important to claim in perpetuity the skilled (and necessarily costly) supervision of the Office of Works or of some local body working in consultation with it.

ANTIQUITY

The present number completes the eighth year of ANTIQUITY. According to present-day opinion it is held that a 'generation' in the life of a periodical must be put as seven years, and therefore we may feel pleasure in having survived the first stage, one which has been so affected by the Great Depression and the most unfavourable time imaginable for establishing such an undertaking.



We hope that we may survive yet another 'generation' though, to put it quite plainly, it means that to do so we must retain the support of all our present subscribers, and that we must attract others. We hope we shall do both. So far as the first are concerned we would ask their attention to the notice printed below, and say once more that an early response is a very considerable help to us.



VOLUME IX, FOR 1935

A renewal form for subscriptions for 1935 is inserted in this number and we shall be very glad if our subscribers will return it with their cheques as promptly as they may find convenient. The forms are omitted from copies sent to subscribers who pay through banks or who have paid for 1935 in advance.

Rome in the Middle East*

by SIR GEORGE MACDONALD, K.C.B.

THAT which hath wings shall tell the matter', says the Preacher. Readers of ANTIQUITY do not need to be reminded of the fresh connotation which aerial photography has given to the text, but never before has its truth been so convincingly driven home as it is by the latest achievement of archaeological aviation. It may be said at once that this account of the Eastern frontier is one of the most important and illuminating contributions ever made to the unwritten history of the Roman Empire. Incidentally, as M. Cumont points out in his lucid and appreciative introduction, its usefulness as a guide for future explorers can hardly be over-estimated. Hundreds of miles of a *terra incognita* have been thoroughly reconnoitred, so that exponents of the older and less spectacular methods now know exactly where it will profit them to ply the spade and pick. And it is certain that their reward will be rich. Though the sandstorms of the desert may bury, they are in other respects far less destructive than cultivation. In course of time the wonders of Dura-Europos will be repeated or, it may be, eclipsed at other sites. Scholars will then be able to reconstruct with confidence the whole organization of the army of the East, a subject that has hitherto been well-nigh hopelessly obscure. A flood of new light will be thrown on the relations of Rome, first to the Parthians, and then to the Sassanians. At long last we shall learn something of the losing battle which Roman civilization had to fight when it was transplanted to a Semitic countryside, studded here and there with Hellenic towns,—something, that is, of the gradual process by which the legions of the West were slowly but surely transformed into a host of Orientals.

* *La trace de Rome dans le désert de Syrie, le limes de Trajan à la conquête Arabe, Recherches aériennes* (1925-1932), by A. Poidebard, with an introduction by F. Cumont. Published for the Haut-Commissariat de la République Française en Syrie by Paul Geuthner, Paris, 1934. pp. xxiv, 213, with map and atlas of 161 plates. 350 frs.

ANTIQUITY

Meanwhile Père Poidebard has given us enough to study and digest. Experts will be keenly interested in the page or two which he devotes to technique, while even laymen will be filled with admiration for the manner in which he and his collaborators of the French Air Force have overcome the peculiar climatic and other difficulties with which they had to contend. As a rule, a height of 1000 feet or so proved most convenient. Not seldom, however, they flew much lower. One route with a length of 150 miles was surveyed from less than 80 feet above the ground. In a country such as our own the best results are, of course, obtained in the early morning or the late afternoon, when the shadows are at their longest. In Syria these hours are the most fruitful too. But occasionally the markings obstinately refused to reveal themselves, unless the camera was trained almost directly against a sun that was already high in the heavens (PLATE I), or again unless the view was taken under the shelter of a thick canopy of cloud. Still more surprising is it to be told that by a system of screening, analogous to the infra-red process, hidden walls could be made to appear upon the plate, although their presence was not betrayed by so much as a solitary wrinkle on 'the desert's dusty face'. Wherever practicable, discoveries made from the air were confirmed by investigation on the surface. Sometimes ordinary trial-pits were dug, but recourse was frequently had to more novel expedients. Thus, a track that was visible only from above might be verified by giving a string of camels their head. Vegetius long ago remarked that these animals have an almost uncanny instinct for treading in the long-obliterated footsteps of their predecessors.

Eight laborious years of such work have gone to the composition of the picture which is presented in the magnificent series of plates now put at the disposal of historians. Its significance can best be measured by a comparison with the relevant section of the article 'Limes' in Pauly-Wissowa's *Real-Encyclopädie*, which was rightly made the datum line for the new enquiry. This is a masterly summary by Fabricius of the facts accessible in 1926, but at almost every turn the writer finds himself hampered in his endeavours to discern a coherent scheme. Now and again short stretches of road and isolated *points d'appui* had been identified beyond dispute. A few hints could be gleaned from stray inscriptions. That, however, was practically all, for the scanty references in ancient literature did little more than make darkness visible. On Père Poidebard's map the whole outline is as clear as noonday, and we have before us in its completeness one more monument of the

ROME IN THE MIDDLE EAST

genius of Rome, one more proof of the sagacity of her administrators and the consummate skill of her military engineers.

Alike in its political and in its geographical aspect the problem they had to solve was extraordinarily complex, and it assumed different forms at different times. When Pompey annexed Syria, Rome was brought face to face with Parthia. Taught by the experience of Crassus and Mark Antony, Augustus preferred diplomacy to arms as a means of maintaining peace. Accordingly he encouraged the growth of a group of buffer states. Palmyra, the most conspicuous of these, was also the most typical. As the chief emporium of the rich trade between the Persian Gulf and the West, this 'Venice of the Desert' was the greatest of the caravan cities (PLATE II). The formidable force of mounted archers which she had at her disposal sufficed to ensure the safe transit of her merchandise through the sandy wastes, while at the same time it served to protect Southern Syria against the desultory incursions of Bedouin raiders. On the north the defence was not dissimilar, although in different hands. As the power of Parthia waned with the passage of time, the relation of Rome to the buffer states tended more and more to become that of suzerain to vassals. It was not, however, until Trajan pushed across the Euphrates and occupied Mesopotamia that anything of the nature of an Eastern *limes* came into being. Our history books have taught us that the tide of conquest ebbed and flowed during the centuries which followed. The full effect of this upon the frontier we are now for the first time able to visualize.

The sequence of events in the north can be quickly summarized. There the prudent Hadrian promptly withdrew to the right bank of the great river. The check, however, was only temporary. Under Marcus Aurelius the forward movement was resumed. It was continued more or less intermittently until the beginning of the third century, when Septimius Severus, himself an 'Easterner' alike by temperament and by conviction, completed the task which Trajan had begun and transformed Mesopotamia into a Roman province. Though more than once severely shaken, the truly 'scientific' frontier which he drew between the Euphrates and the Tigris held firm for a century and a half. But it failed to withstand the storm that broke over it in A.D. 363, when Julian's disastrous expedition against Persia, ending as it did in his death, transferred the reins of government to the incompetent hands of Jovian. The humiliating terms of peace involved the cession of Mesopotamia and the withdrawal of the Romans to a line that was far less well adapted for defence.

ANTIQUITY

The story of what happened in the south is less easy to compress. At first Palmyra flourished amazingly in her trade. As a political entity, on the other hand, she had (in Gibbon's phrase) 'sunk into the bosom of Rome'. On the Column of Trajan we can see Palmyrene archers following the Emperor into Dacia, while presently, though not perhaps until the reign of Hadrian, the city received a Roman garrison, retaining however her own troops, trained and equipped for desert warfare. Finally Septimius Severus conferred on her the status and privileges of a Roman colony. All the while the Syrian border was reasonably safe. But in 227 a new portent rose above the Eastern horizon. Ardashir, the founder of the dynasty of the Sassanidae, pressing west and north, overthrew the Parthian monarchy and proclaimed himself 'King of Kings'. Three years later he entered the lists against Rome and challenged her title to the possession of any territory west of the Aegean. Equilibrium was temporarily restored by Severus Alexander, though at a heavy cost. But, in spite of the efforts of succeeding emperors to preserve the balance, a new and graver crisis developed in the reign of Gallienus when the *catafractarii* of Shapur, the son of Ardashir—horsemen whose steeds, like themselves, were clad in mail—broke down all resistance, overran Syria, sacked the great cities like Antioch, and penetrated into Asia Minor. At this juncture the whole of the East would have been irretrievably lost, had Palmyra decided to throw in her lot with the Persians.

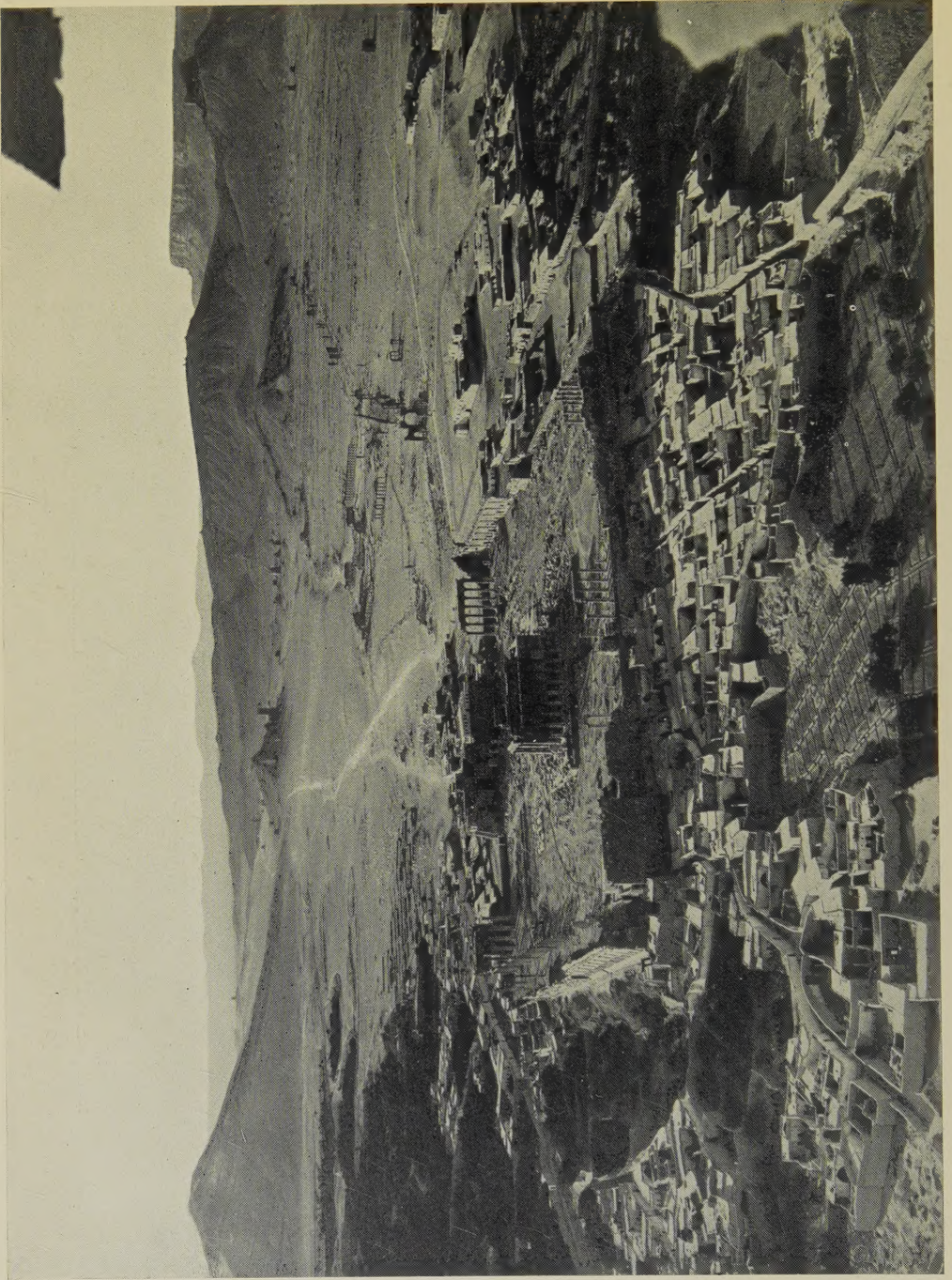
Her prince Odenathus, however, elected to keep faith with what seemed to be the losing side, and in so doing he inaugurated the meteor-like career of the Palmyrene Empire. Gathering his own forces and a swarm of mounted Bedouin Arabs, he hung upon the flank of Shapur as he returned laden with booty to Ctesiphon, harassing his march and ultimately inflicting on him a humiliating defeat. During the next few years he carried the war into the enemy's country and recovered, in the name of Rome, practically all that the Persians had won. Content with the shadow of sovereignty, the grateful Gallienus recognized him as virtually a co-regent in the East. He had not enjoyed the distinction long before he fell by the hand of an assassin. His son Vaballath being a mere child, the queen-mother Zenobia, one of the most remarkable figures in history, took command of the situation, maintaining the form of allegiance to Rome until the time should be ripe for abandoning all pretence. When she thought that the moment had arrived, she signalized her declaration of independence by sending her troops to invade and annex Egypt. But the Imperial master whom

PLATE I



DEYK ŠEMÁLI. INTERSECTION OF TWO ROMAN ROADS, INVISIBLE EXCEPT FROM THE AIR. PHOTOGRAPH TAKEN AGAINST THE SUN
Plates I-VIII, by permission of M. le R. P. Poidebard

PLATE II



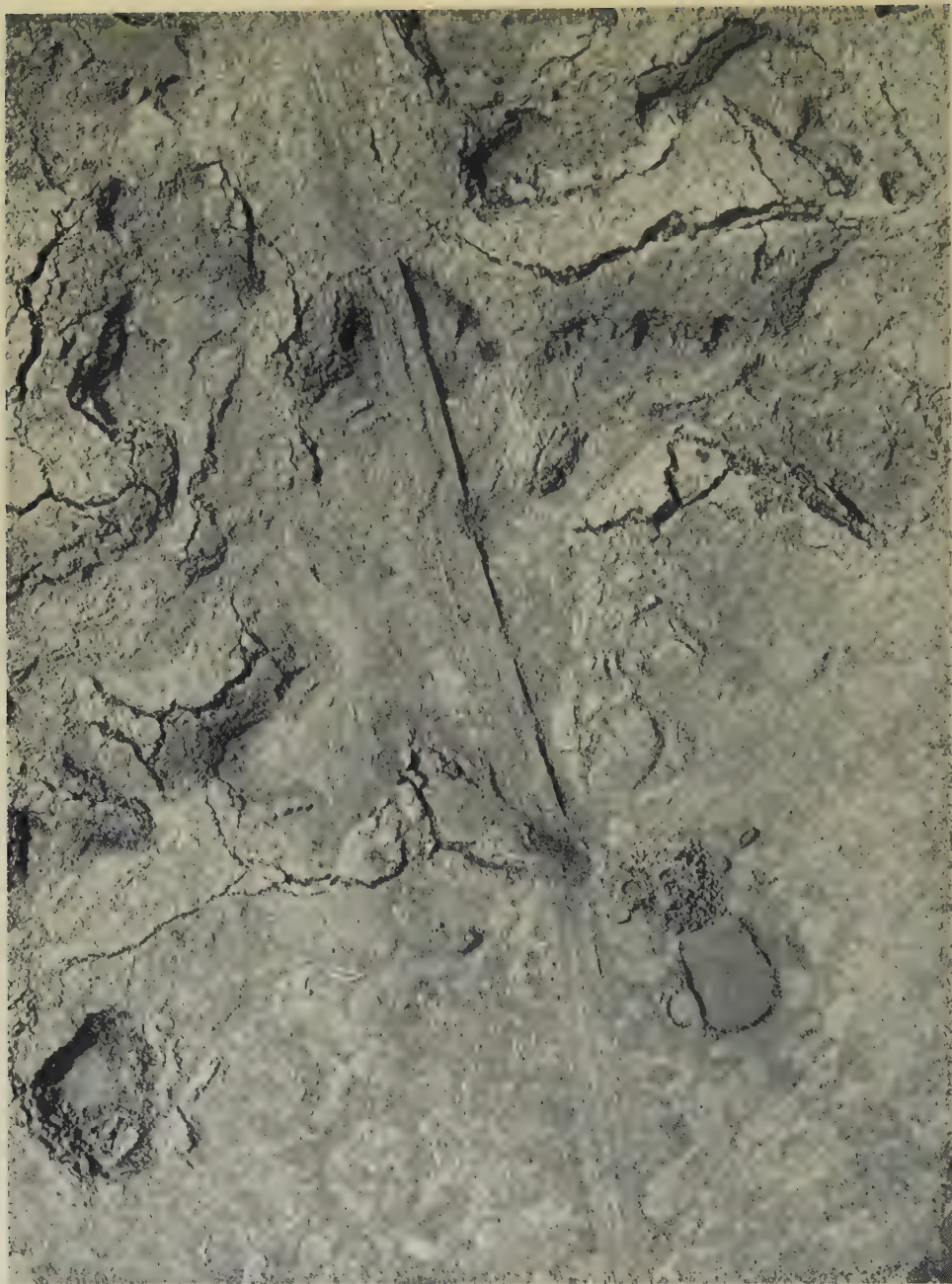
THE TEMPLE OF BAAL AT PALMYRA

PLATE III



HÂN AL-QATTÂR, WITH CISTERN AND LATER ACCRETION OF BEDOUIN ENCLOSURES

PLATE IV



ROMAN ROAD FROM BOSTRA TO DAMASCUS, WITH WATCH-TOWER

PLATE V



ḤAN AL MANḤŌURA, WITH RESERVOIR AND AQUEDUCT LEADING TO CISTERN

PLATE VI



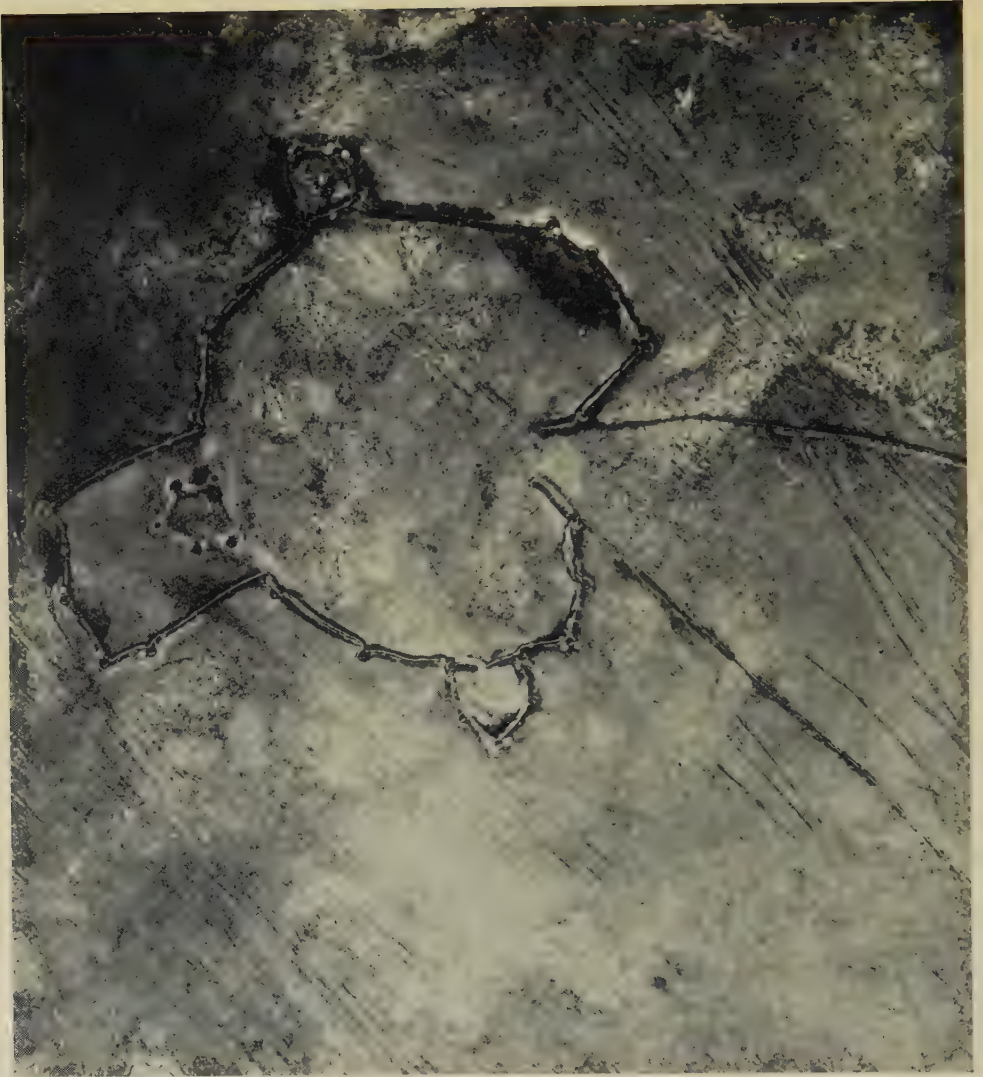
THE DAM AT HARBAQA

PLATE VII



HEAD FOR CARAVANS FROM PALMYRA TOWARDS THE PERSIAN GULF

PLATE VIII



BEDOUIN ENCLOSURE

ROME IN THE MIDDLE EAST

she had to encounter was no longer Gallienus. He was the far abler and more energetic Aurelian.

As soon as he had freed himself from dangerous embarrassments elsewhere, the new Emperor turned his face towards the East. Overcoming the stubborn opposition of Zenobia's army, he crossed the desert and laid siege to her capital. The queen attempted to fly but was captured, and the city opened its gates rather than endure the horrors of a blockade. The clemency which the victor extended to both was ill-requited on the part of the Palmyrenes. Hardly had Aurelian returned to Europe than he learned that they had risen in revolt and massacred the garrison he had left behind. Before they had leisure to repair the dismantled defences, he was once more at their gates with an army. This time no mercy was shown. Not only the rebellious citizens, but women, children, old men and peasants are said to have been ruthlessly butchered. That was the end of Palmyra. To quote Gibbon once more, 'the seat of commerce, of arts, and of Zenobia, gradually sunk into an obscure town, a trifling fortress and at length a miserable village'. Its failure to rise from its ashes was not, however, solely or even mainly due to the dreadful nature of the vengeance that had been exacted. The *raison d'être* of the caravan city had disappeared. The new power that had arisen on the farther side of the desert made very different arrangements for putting the merchandise of the East upon the Roman market. When the caravan trade did revive at a later time, it was in the hands of the Arabs.

The well-worn tale was worth recalling at some length, since its climax has a most important bearing on Père Poidebard's researches. Palmyra fell in 273. There followed twelve troubled years, darkened by the murder of Aurelian himself and then, in quick succession, of the six emperors who came after him. In 285, however, the accession of Diocletian opened the way for an era of more settled government. Among the measures carried out by his strong hand was a thorough-going reorganization of the Eastern Limes. The situation that had to be met was entirely new. Hitherto nothing more had been needed than a line of forts along the fringe of Syria. Now the bulwark of Palmyra was gone. Gone, too, was the caravan trade, and with it the necessity for a powerful mobile force to protect the routes that traversed the desert from west to east. Instead, there was an urgent call for a continuous barrier which should provide the Syrian towns with an effective defence against attack by the mailed cavalry of the Persian king, and behind the shelter of which the traffic between Arabia and the north

ANTIQUITY

could pass to and fro unmolested. To this period belongs the road-system known as the *strata Diocletiana*. That many of the Limes forts are of the same or of a later date is evident from their outline (PLATE III), the treatment of the corners presenting a notable contrast to what was usual in the first and second centuries.

To give a detailed description of the whole would demand far more space than is here available. Nor is it at all likely that the different stages of evolution will be satisfactorily disentangled until a certain number of the key-positions have been excavated. The main features, however, already stand out with unmistakable distinctness. The principal line ran north from Bostra to Damascus, whence it swung north-eastwards to Palmyra and then north again to the Euphrates, which was reached at Sura. From Sura it followed the bank of the river down to Circesium, where it joined the Mesopotamian frontier, as defined by Septimius Severus, and made its way north-eastwards past Singara to the Tigris. Its sinuous course of more than 600 miles was determined by two weighty considerations. The first was the equipment and tactics of the foe who might be expected to assail it: except when it has the Euphrates in front, it clings persistently to ranges of rough hills or to stretches of broken and rocky ground, on which it would be next to impossible for heavy cavalry to manoeuvre (PLATE IV). The second was the indispensability of an adequate water-supply for the men who were to hold it: a meteorological chart shows that within this arid region there is a belt of comparatively greater humidity, while the air-survey proves that the Roman engineers must have been fully alive to its existence since they were careful never to go beyond it.

No attempt was made to construct a *vallum* such as we know so well in the West, perhaps because material was hard to come by, perhaps because in that world of drifting sand its ditch would have been quickly filled. Instead, the Limes reverted to type and became a road connecting a chain of fortresses and forts and observation-posts, more or less regularly spaced and each in touch with its neighbours. That, however, was not regarded as sufficient. Out in the desert and parallel to the principal road were other roads, similarly fortified, as were also the transverse roads that served to complete the network. Nothing is more impressive than the evidence of the immense pains taken to safeguard the water-supply. Ruined wells and cisterns for storage abound. If there was no spring in the immediate vicinity of any spot that was otherwise appropriate for a fort, a reservoir would be formed and its contents tapped by an aqueduct (PLATE V). Occasionally

ROME IN THE MIDDLE EAST

a great dam would be built (PLATE VI). The construction of the roads displays a similar readiness in adapting means to end. The method employed depended on the nature of the ground. Wherever there was a risk that the annually recurring rains might produce a quagmire, solid blocks of paving were most carefully laid down. Usually, however, the surface was so hard and dry that any part of it could be used as a thoroughfare, and then all that was done was to indicate the track by rudimentary kerbing on either side. Even when not visible on the surface, the position of these kerbs is generally recognizable from the air (PLATE VII). Nor is it always necessary to search for them. In many cases the exact direction taken by the Roman road can be traced by following the forts and posts with which it was dotted.

Save for a short-lived experiment in Britain, the *limites* of the West consisted of single lines. Why was the usual practice departed from in Syria? Possibly in order to exercise command over the wells and oases for some distance in front of the Limes proper. If the water-supply were in Roman hands, the movements of the Persian armies would be grievously hampered. Doubtless, too, its possession would be a valuable asset in dealing with the Bedouin tribes. That the Romans had intimate relations with these nomads is beyond question. In their seasonal migrations the latter must have made their way through the carefully guarded passes of the Limes twice a year—once in spring when the outer region became a Sahara, while pasture was abundant on the slopes of the mountains to the west, and again in late autumn when, for a brief spell, the annual rains made the desert blossom like the rose. That the relations were, sometimes at least, those of allies is apparent from one of Père Poidebard's most interesting discoveries. At several points of great strategical value for the defence of the Limes he detected camps of a form so peculiar that one cannot believe that they were intended for the accommodation of Roman troops (PLATE VIII). They must have been for the housing of Bedouin auxiliaries. The *antennae* are obviously designed to facilitate the driving in of their flocks.

So well and wisely had Diocletian planned that, except for the one 'rectification' which has been already alluded to, his frontier remained the frontier of the Empire until more than three centuries after his death. The exception, it will be remembered, was in the north. After the defeat of Julian, the successor of the Apostate had to surrender Nisibis and Singara and to content himself with a shorter and more vulnerable line, running southwards from Dura towards Circesium.

ANTIQUITY

Otherwise the heritage of Diocletian was transmitted intact to the Byzantines. In their hands it sufficed to keep the Eastern hordes at bay until 636, when the Saracens crashed their way through at the bloody battle of Yermak and drove Heraclius out of Syria. We may be sure that during its long life it witnessed many vicissitudes. To meet the changing requirements of the art of war, new forts would be built, old forts deserted or remodelled. When we remember that the aeroplane record covers the whole of these and indeed actually includes the early caravan-tracks used by the Palmyrenes before the advent of the Romans, it will be manifest that the interpretation of Père Poidebard's map in all its bearings is likely to absorb the labours of several generations of scholars. Fortunately thanks and congratulations do not need to be delayed until the process is completed. They can be unreservedly offered to him now.

NOTE. The Editor wishes to thank Père Poidebard for his kindness in lending the original air-photographs from which the plates (I-VIII) have been reproduced.

Britannia

by HAROLD MATTINGLY

Assistant-Keeper, Department of Coins and Medals, British Museum

THE storied name which stands at the head of this paper has an immense range of association and interest. Lest the gentle reader be frightened at the outset by too extensive a prospect let us define at once the limits we have set to our present inquiry.

There is a knowledge of Britain that is characteristic of this and the last century. It is a knowledge founded on the results of numberless excavations on surveys of roads, forts and cities, on intensive study of stratification and of the evidence hidden in broken pots and half obliterated coins. It is a knowledge that must have made up a remarkable whole in the mind of a scholar like the late Professor Haverfield ; that still makes up such a whole in the minds of a handful of scholars still living today. For most of us this knowledge is only to be gained at second-hand from the summarized reports of the experts ; at best we may be able to add a personal acquaintance with some small part of the subject. It is a knowledge that advances progressively and comprises most of the hope for the future. With it, however, the present paper is not mainly concerned. We turn rather to that other branch of knowledge that is represented by the sum total of what ancient writers have reported of Britain and its inhabitants. It is a kind of knowledge that was probably more firmly retained in the memories of scholars of a century or more ago than of most experts of today. We have so many first-class books of reference to rely on that we are content that the information should be there at hand in reserve, until some particular occasion leads us to turn up the authorities. Such knowledge, at its worst, is heavily alloyed with error and is, in all cases, difficult to control. At its best, however, it does speak to us of aspects of life and civilization of which archaeology has seldom much to say ; and it may, therefore, be worth our while to spend a little time in ranging over its field and selecting what seems to us most reliable and interesting. The material lies before me as I write in the colossal *Monumenta Historiae Britannicae*, published in 'The Rolls Series' by royal command in 1848. Brief as must be our survey in one short paper, we may find some interest and profit in observing the nature of our ancient authorities on British history and civilization, in studying more closely one or two of the more

ANTIQUITY

famous of them, and in trying to form our own conception of the impression that Britain and its peoples made on the inhabitants of the Roman Empire at the different stages of conquest and occupation. As an appendix we add a short account of the representations of Britannia in Roman art, that is to say on Roman coins—the one serious source of our information. The subject has of course been treated before, but it has an obvious bearing on the main theme of our paper ; the material has been increased during the last few years and, even in the older and more familiar part of it, it should be possible today to offer something of novelty and interest. A brief study of the type of Britannia in our modern coinage will form a natural end to our paper.

Our literary knowledge of Britain is derived mainly from two kinds of sources—the ancient writers on geography and the ancient historians, who came to speak of Britain in its relations to the Roman Empire. Among the former we think at once of Strabo, who could draw on the discoveries of Julius Caesar and who could perhaps have made more use of those of Pytheas of Marseilles, had he held a less unfavourable opinion of his veracity ; of Pomponius Mela, who writes with the prospect of a great increase in knowledge to follow the conquest of Claudius ; of Pliny the Elder, who dealt with Britain methodically in his geographical survey of the ancient world and, at various odd points, where examples from Britain could be fitted into his encyclopedia of learning ; of Ptolemaeus and the Itineraries, with their close detailed accounts, that form the basis of our exact knowledge. Among the historians we are fortunate to be able to number Julius Caesar, who reports his own expeditions with his accustomed mastery ; Tacitus, who records the course of Roman conquest and who, in his ‘Agricola’, has given us the only surviving monograph on our island ; Dio Cassius, who chronicles with some fullness the revolt of Boudicca and the expedition of Severus ; the Panegyrists of the third to fourth century who throw some light on the adventure of Carausius—not to mention the many others who here and there touch on British history in its place in the Roman Empire. There remain the occasional references to Britain and things British in general literature—on the whole, most disappointingly scanty, but adding up in the sum to a not negligible amount. Britain herself made no contribution to the literature of the Empire. How much would we not give for an account of British life by some Roman Briton, who might have brought to his local interests the resources of literary style ! Here we find a lacuna in our knowledge,

BRITANNIA

which itself, however, is not without its own significance. It marks clearly one of the limits of Roman civilization in our island.

Before Roman times Britain lay almost outside the range of ancient history and even of ancient myth. Even that famous traveller, Hercules, was never brought quite so far west in his wanderings. There is one bare reference to a visit of Ulysses to Scotland. It was left for later days to link Britain to the great cycle of ancient legend by bringing thither 'Brute the exile man'. Rumours of the tin isles, the Cassiterides, were current in the time of Herodotus. But the ocean beyond the Pillars of Hercules was a 'closed sea' of the Phoenicians. They guarded their monopoly of these waters with zealous care. We all know the story of the Phoenician galley that decoyed an inquisitive stranger on to the sand-banks. Pytheas of Marseilles was the first to adventure out into the unknown and bring back some more exact knowledge of the νῆσοι Πρεττανικαί, of Albion and its neighbour, Ierne, of furthest Thule and of the numberless little islands that made up the group. C. F. Angus has recently written of him in GREECE AND ROME and we may refer our readers to his delightful article. The expedition of Pytheas fell, it seems, soon after the first Punic War, and was, no doubt, prompted by the opportunity offered through the decline of Carthaginian sea-power. Pytheas undoubtedly travelled widely in Britain and brought back information of the highest value. But he was unfortunate in his reception by the learned world. His adventurous enterprise was rewarded with the most unjust reputation of being a colossal liar—an injustice in which as great a geographer as Strabo bears a dishonourable share. But from the time of Pytheas onwards Britain was no longer the completely unknown island. Curiosity had been aroused and had at least a material to work upon. Yet so little general impression had the voyage of Pytheas made that Julius Caesar could report, when he thought of crossing to Britain, that he could find little reliable information and that only from Gallic merchants, who had travelled in the maritime districts facing Gaul.

Caesar, as many of us will remember from our school days, made two expeditions to Britain, in 55 and 54 B.C., at first to reconnoitre, then to achieve some sort of conquest. He won some engagements, crossed the Thames—riding on an elephant, according to one account—and compelled Cassivellaunus to give hostages and pay tribute. Great expectations were however grievously disappointed. We learn from Cicero's letters how the hopes of gold and silver treasure were defeated; how, in fact, there was as little to expect as to fear from the island. No

gain could be expected except in captives, and even these not of a highly trained type : so says Caesar, as if to contradict in advance Bernard Shaw's amusing fancy of a British secretary of Caesar. Even the British pearls,* of which much had been heard, proved to be inferior in size and quality : none the less Caesar dedicated a breast-plate adorned with them in the temple of Venus Genetrix. Yet Caesar's exploit touched the Roman imagination. Britain, 'divided utterly from the whole world', set beyond the ocean as in an orb of its own, had been forced to open a door to the advance of the Roman arms. The flight of the Roman eagles across the sea to Britain seemed to symbolize the completion of the Roman domination of the world.

Caesar himself was fully conscious of this aspect of his adventure. It is in fact hard to find serious strategic justification for his invasion. Finding, as we have seen, little reliable information to work on, he deemed it advisable to send in advance Commius the Atrebate to spy out the land. With the details of his fighting we are not concerned, but turn rather to his sketch of the conditions that he encountered in Britain, in the twelfth and following chapters of the fifth Book of his Gallic War. The sea-coast was held by invaders from Belgica, the interior by the native Britons. The population was dense ; houses, built like the Gallic of wood and mud, were plentiful ; there was great wealth of cattle. For exchange the Britons used bronze or gold coin or iron nails, fixed at a certain weight. Inland was found tin ('white lead') ; near the coast iron, but only in small quantities ; bronze was imported. Timber was plentiful as in Gaul, but beech and pine were missing. Hares, fowl and geese were kept for amusement and pleasure, but it was forbidden to eat them. The climate was milder than that of Gaul, and the frosts were slighter. Most civilized and like the Gauls were the people of Kent. In the interior were wilder folk, who did not in general sow grain, but lived on milk and flesh and dressed in skins. All the Britons were accustomed to dye themselves with woad (*vitrum*), which gave them a grim appearance in battle. They wore their hair long, but shaved the whole body except head and upper lip. Wives were held in common, usually within families, and the children were considered to belong to the woman's first husband. Later, in the thirteenth and following chapters of Book VI, Caesar tells us something of the Druids, that strange priestly caste, which he had already encountered in Gaul. Britain ranked as the home of the caste

* Still fished for ; see ANTIQUITY, September 1934, p. 342.—EDITOR.

BRITANNIA

and was visited by aspirants for admission. The Druids were not only interpreters of religion, but teachers of the young and judges in serious cases. They spent long years in acquiring their training and committed thousands of verses to memory. They had much to teach about the immortality of the soul, and the nature of the world and the heavenly bodies. They held a position of great privilege and power and were exempt from military service and taxation.

From the time of Julius Caesar onwards, Britain, if still in all but name independent, lay within the Roman orbit: Catullus's 'horribiles ultimi Britanni' have ceased to be quite so uncouth or remote. Cicero jokes with his friend Testa about British war-chariots and charioteers. Propertius compares the make-up of a Roman beauty to the 'infecti (painted) Britons'. Is the epithet 'virides Britanni' of Ovid a description of a blue-green dye? Something is known of the physical character of Britain—flat and fertile, but still with many hills, dowered with woods, lakes and great tidal rivers. The natives, less tawny-haired than the Gauls, are large, but loose of limb. They drink a blend of grain and honey. They are fond of gew-gaws, imported from Gaul. Rumours from Ireland speak of a people, wilder still, given to cannibalism and the eating of dead kinsmen. The size of Britain is more or less correctly understood, its exact shape less certainly. An erroneous belief that was slow to disappear was that it lay between Gaul and Spain. The 'Pretannic' islands now become the 'Britannic'. The name of the people occurs in a variety of forms—Britanni, Britanni, rarely Brittanni, and Brittones.

When Augustus ended the civil wars the addition to the Empire of Britain was, with the recovery of the standards from the Parthians, the exploit which was to round off his fame. The fact that poets so high in the imperial favour as Virgil and Horace come back again and again to the project proves not only that it was in men's minds, but also that Augustus himself was not unwilling that it should be so. A chance reference in Virgil has rescued for us the interesting detail that figures of Britons were woven in the curtains of the theatre in Rome. Why Augustus never actually brought the scheme to the point of action is not quite clear. Perhaps it is enough to say that there was no urgency about Britain, whilst urgent claims on his attention did arise in Germany, Spain and the East. Tiberius was averse to unnecessary innovations and he had the precedent of Augustus to plead. Caligula, however, played with the thought of an invasion and presumably would have carried it into execution, but for his lack of sustained purpose. His

ANTIQUITY

successor, Claudius, at any rate made the conquest of Britain the main feature of his policy abroad. We have no exact account of the motives that swayed him. He may have seen a possible danger to Roman rule in Gaul in the existence of a free Britain so close to its shores. He certainly will have shared the general suspicion and dislike entertained by Romans for the Druids, with their political influence, their secret doctrine and their human sacrifices ; and Druidism could only be slain in its home in Britain. Decisive were the considerations that the Emperor needed the show of military glory, that his arms were free elsewhere, and that it concerned Roman prestige, if not Roman security, to complete a scheme of conquest that had once been attempted, but left unfinished. Seneca, in his bitter satire on the dead Claudius, asserts that he had resolved before he died to see the Britons adopting the Roman garb, the ' toga '. Pomponius Mela, who wrote at the very time when the conquest of Britain was being planned, looks forward to the new knowledge that will ensue. His own knowledge of Britain is based mainly on Julius Caesar. He has something to add about Ireland, already known for its wonderful verdure and richness of pasture, but inhabited by a wild folk, who were strangers to the ordinary decencies of human society (' *pietatis admodum expertes* '). The natives of Ireland and Scotland too, as we shall see later, come in for even severer handling from Roman observers than do the Britons themselves.

The Roman conquest followed a steady and consistent course, interrupted only by the great revolt of Boudicca under Nero. Britain ceased to enjoy the prestige of the unknown and came to be recognized as what it really was : a land with little wealth beyond human life, and likely for a long time to prove a debit rather than an asset to the Empire. Romans would appreciate the story of Caractacus, captive at Rome, marvelling at the splendours of the city and wondering what could have led its owners to covet his own poor land. The two cultures—the superior Roman and the feebler native, clashed—and, when it came to a violent outbreak, the weaker almost won the day. Boudicca raised a revolt against the Roman instruments of oppression—the recruiting sergeant, the tax-collector and the usurer. Her countrymen might be unskilled in the arts of peace, but they had the taste for liberty and could fight for it. The fact that they would follow the lead of a woman is expressly noted as an example of that high regard for women which was characteristic of the Celts. For the Romans the retention of Britain was a matter of military honour : valuable or worthless, it was

BRITANNIA

the prize of the Roman arms and, as such, must not be let go. Paulinus, at the decisive battle, urged his men, if matters came to the worst, to die where they stood and in that way at least hold Britain. But that last necessity never arose. Britain was destined, even without the effort of a reconquest, to follow for centuries in the train of Rome.

Of the next age of Britain, in which it settled down to assimilate Roman civilization, Tacitus gives us a wonderful picture. The governorship of Britain, the conquest of the West, the North and even of a part of Scotland was the life-work of his father-in-law, Agricola. Into his personal tribute to Agricola Tacitus has woven a picture of the isle as it became Roman. Successful as a conqueror, Agricola was even more significant as a teacher of Roman ways. Britain was passing from the hands of kings into those of rival chieftains, whose quarrels made the tasks of Rome the lighter. Agricola encouraged the Britons to take the primrose path to peace, to build temples, markets and palaces, to train their sons in the liberal arts, to match their native wit against the studiousness of the Gauls, to adopt the once hated Latin tongue and even to aspire to a mastery of it in public speaking. The Roman *toga* was now seen in British streets. Porticoes, baths and richly appointed banquets followed—the ‘pleasant inducements to vice’, as Tacitus harshly brands them. The unsophisticated Britons thus absorbed slavery, mistaking it for civilization. For a moment, the conquest of Ireland must have seemed possible. Agricola, we know, had considered the probable cost and had decided that it would not be excessive. But the jealousy of Domitian—or shall we say the fortune of Rome?—saved the Romans from burning their fingers over that lovely but difficult island. The exploit of the mutinous cohort of the Usipetes, that circumnavigated Britain, adds a touch of sheer romance to the thrilling story of Agricola’s wars.

The Roman view of Britain was naturally undergoing a steady change during this period. Even if Britain would not generally attract sightseers, it would now be visited regularly by officers and civil servants on duty. ‘Ultima Thule’ is now so far from its original seclusion that it ‘talks of having its professor of Oratory’, says Juvenal. Martial reports complacently that his verses are said to be popular as far as Britain. A revolt among the Brigantes at the end of the reign of Trajan destroyed a legion, but made no permanent interruption in the life of the province. Hadrian visited Britain and planned its northern defences, based on the great wall from Newcastle to Carlisle. In due course, when he celebrated his imperial policy on coins towards the

ANTIQUITY

close of his reign, he gave Britain and the British army their due place. Under him and his immediate successors the Empire reached its zenith. There was a sense of general prosperity and happiness, and, what was even more, some dawning recognition that the relation of Rome to her loyal and peaceful provinces was something more than that of master to slave. In this prosperity and this wider view of what the Empire meant Britain had her share.

With the campaign of Septimius Severus against the peoples of Scotland, we get a fresh glimpse of native conditions—this time among barbarians who had learnt little from being neighbours to a Roman province. Severus fought against the Mæatæ north of the Wall and the Caledonians north of them, but, despite great efforts, including the building of many bridges over the marshes, he had effected little when he died at York. His sons hastened to conclude a peace and return to Rome. The chief result of the campaign was perhaps to enhance the reputation and self-confidence of the Army of Britain, which as early as 193 had been one of the main supports of Albinus and which was now bound to gain in prestige from its service under the Emperors in person. In the third century it ranked perhaps after the Illyrian army as the second best corps of the Empire ; and, as armies in the third century were to a large extent recruited locally, this has a real importance in its bearing on the development of Britain itself. What we hear about the enemies against whom Severus fought must not be applied to the Roman provincials. The Mæatæ and Caledonians were still barbarians as the Britons had been when Caesar landed. We hear of their country—mountains and rough plains, devoid of cities ; of their simple arms, shields and spears tipped with bronze apples ; of their crude mode of life, sharing women and children in common ; of their endurance, how, naked and unshod, they would maintain life on roots and rushes and would pass whole days in marshes, almost submerged, with only their heads showing above water. Barbarian simplicity is again contrasted with Roman sophistication. When the Empress taunted a native princess with the loose morals of her sex in Britain, the princess replied, that they thought it more decent to seek the love of the best men without subterfuge rather than to submit to the secret attentions of the basest.

Of the fate of Britain during the storms that shook the Empire in the third century we hear but little till near its close. When Gaul sought its separate salvation under the able Postumus, *c.* 258, Britain with Spain shared in the adventure. While it is true that this in no

BRITANNIA

sense represented a revolt against Roman authority as such, it must have stimulated a certain feeling of provincial independence. Gallienus from Rome seemed unable to quell the foes that rose in succession against him. The western provinces instituted a claim to represent Roman tradition more faithfully than Rome herself, and even tried to restore the unity of the Empire from the West instead of from the centre. Aurelian finally restored imperial unity when he deposed Tetricus in 273, and Britain returned with the other provinces to her allegiance. But there are hints which suggest that there was some reluctance in her return. When in 286 Carausius, the base-born Menapian, admiral of the Saxon shore and secret confederate of the pirates whom he was supposed to control, revolted against Maximian to escape execution, Britain adopted his cause with alacrity and greeted him with the Virgilian quotation on the coins, 'Expectate veni', 'Come, O long desired one'—surely a very frank confession of a disloyalty to Rome of long standing. Carausius himself was no Briton, and as he, or at least his successor Allectus, relied mainly on the services of Saxon pirates, the Britons may have had no very large share in his rule. Carausius too, like Postumus, claimed to stand for the true Roman tradition, and at the first opportunity made his peace with the Empire. But even after the peace Britain remained for the time a separate section with an Empire of its own. For the first time in history the significance of the insular position of the island was made manifest. Defended, not as before Julius Caesar by inaccessibility and ignorance, but by her fleet in the narrow seas, Britain could face the continent of Europe as an independent power. The short episode was indeed soon over. Constantius Chlorus eluded the defending fleets in a fog, recovered Britain and reunited it to Rome. The official statement was accepted without demur. Britain, torn from her allegiance by a villainous arch-pirate, was now restored from heathen darkness to the true light of the Empire by the valour of Constantius. The loving-kindness of the Emperor forgave the erring province and raised her again to her feet. There was no immediate sequel then to the adventure of Carausius. But, in the gentle policy pursued by Constantius, in his care for the defences of the province, in his residence in the island, we may see signs that the lesson of the revolt was not entirely misread at headquarters; it was realized that, if Britain were to remain loyal, she must receive more attention than she had received before. Certainly the early fourth century was a time of prosperity and prestige for Britain. For the first time the island had an imperial mint at London—the continuation

ANTIQUITY

of one of the mints opened by Carausius. Constantine the Great was, according to one tradition, the son of a British mother, Helena ; he was raised to the throne by the British army. Now, and not earlier, we hear of Britain serving as a granary for Gaul.

It was a prosperity, however, that was not destined to endure. The darkness fell with a suddenness that must have seemed catastrophic to those on whom it fell. In the sixties of the fourth century an invasion of Picts burst the barrier of the Wall and carried destruction over the whole island. When Theodosius the Elder at last drove off the invaders, damage had been inflicted that was never to be made good. Division in the Empire completed the havoc wrought by invasion. Magnus Maximus—the hero of Kipling’s wonderful British stories—drew off the British army to win Gaul and overthrow Gratian. Late in the century Stilicho gave the island some respite from its invaders—Scots from Ireland as well as Picts from the North—and restored the defences. But the barbarians now began to sweep into the Empire from all sides, and, when Rome herself fell a victim to Alaric, there was little enough interest to be aroused in Italy for the sufferings of Britain. After Constantine the third had repeated the adventure of Maximus and used the British army to win Gaul, there was to be no more recovery. Whether immediately after his fall or a generation later—the date is still disputed—the last Roman garrisons were withdrawn, and Britain was left to fend for herself between her barbarian invaders on one hand and the sea on the other. The Saxons were called in to fend off the Picts and Scots and proved a sorer evil still. On the remnants of Roman-British civilization falls a darkness, almost as dense as that which had rested on the island before the coming of Julius Caesar.

Here, at the close of our historical survey, we may collect a few stray items of information about Britain that belong to no particular period of its history. English hunting dogs were famous. They were not showy, but were prized for their scent. British horses, too, though small and ugly, were esteemed for their endurance. The British geese were famous, as were the British oysters, particularly those of Rutupiae (Richborough Castle) and its neighbourhood. The cherry, we hear, had reached Britain as early as the first century A.D. A tradition of savagery hung about the island even late into Roman times. St. Jerome speaks of cannibalism among the Attacotti as a fact for which he can personally vouch. We hear of British women staining themselves with woad and walking naked in religious processions, or again celebrating orgies in honour of Bacchus. An amusing scrap of Ausonius speaks

BRITANNIA

ill of the general reputation of Britons. He is struck by the curious fact that a Briton is called ' Bonus ' (good), and writes a string of epigrams, calling attention to this strange union of two incompatibles.

Of the coming of Christianity to Britain nothing certain is recorded. One tradition actually made St. Paul himself reach the extremity of the West, or, at least, send a missionary, Aristobulus, to preach the gospel in the island. In the fourth century we hear of British bishops attending Church Councils at Serdica and Ariminum ; at the latter, three British bishops were the only ones, who, through poverty, had to accept state support. In the early fifth century Britain gave birth to its own heresy, that of Pelagius. It was to counter his errors that St. Germanus near A.D. 430 visited Verulam—one of the last glimpses we catch of Roman Britain before the darkness settled over it.

However scanty the materials we have here to handle, there are some pictures that have formed clearly before us, as we have advanced. We have seen Britain at first an unknown world of wonder waiting to be discovered. We have seen it half revealed by Julius Caesar, then conquered by Claudius and gradually conformed to the life of the Empire. Extravagant expectations are disappointed. The unknown proves less magnificent than had been hoped, and Britain settles down to be a province of the second rank. For a moment, in 286, the significance of insular position and sea power is revealed, only to be again forgotten. A short period of recovery and prosperity is followed by a rapid decline and a long night. It is a blow to any national pride that we may be inclined to feel in Britain that its final loss meant so little to the Empire—that any sorrow over parting was mainly on the British side. But indeed the whole story of the Roman period in Britain will teach us, so far as we identify ourselves with our land, a salutary lesson of humility, of not thinking more highly of ourselves than we ought to think !

In depicting Britannia in human guise the Romans were only obeying a deep instinct of their nature. Personification to them was vital and significant—no frigid convention of literature and art, as it is so often today. To the Roman's religious sense there were divine powers behind all the multitudinous phases of life, to whom it was appropriate to offer prayer and sacrifice when their province was in question. Peace, Concord, Felicity were no mere abstractions—they were goddesses, worshipped in temples and enjoying public and private worship. Following on this line of thought, the Roman found it

natural to conceive of every land as having its own divine protector—whether called by its own name or described as its ‘Genius’ or spirit. Here the process of personification was often left only half complete. Roma and the Genius of the Roman People were, no doubt, recognized deities : but the province and the city would have, at the best, a local cult and, outside their own area, would be only half realized as living persons. When the Romans began to represent their provinces on their coins by human figures, in appropriate garb and with appropriate emblems, they were introducing powers that in their own range were deities to a wider sphere of less intense vitality in the art of the Empire.

That Roman interest in the provinces, from which our coin-types spring, begins in the first century of the Empire : it only reached its full development in the second and third. The province might be conceived in several distinct ways—as a ‘*provincia capta*’, an enemy subdued by the might of Roman arms ; as a ‘*provincia restituta*’, a province restored to prosperity by the wisdom of Roman rule ; or as a ‘*provincia fidelis*’ or ‘*pacata*’, a province loyal and at peace within the Roman community of nations. Similarly, as regards representation, the province may be depicted, either by the figure (or figures) of native men and women, or by a superhuman figure, invested with native characteristics (‘ideal native’) or, much less commonly, by a goddess of the conventional Minerva (city-goddess) pattern. The sestertius and Asses of Hadrian, the sestertii and As of Antoninus Pius and the medallion of Commodus (PLATE, nos. 1–5, 7) all show the ‘loyal province’ idea and the ‘ideal native’ representation. On the coins of Hadrian (PLATE, nos. 1, 4, 7) Britain is a female figure, wearing a long garment with fringe, seated in an attitude of rest and security (head propped on right arm), with spear across left arm and huge round shield with central boss at her side : the stones in courses, on which she sets her foot, may, without undue fancifulness, be held to suggest the Great Wall. Antoninus Pius, on his sestertii (PLATE, nos. 2, 3) appears to show a male figure, wearing breeches—in place of female—perhaps the ‘Genius Britanniae’. He is now seated on the pile of stones, and holds a standard in his right hand, while his left rests on a round shield set on a helmet, or, in a rare version, he sits on a globe beyond the waves on which his shield is uneasily balanced—the Briton ‘sundered once from all the human race’. The type of the As of Antoninus (PLATE, no. 6) is a close imitation of the Hadrianic, except that Britannia is seated on the stones and seems to be sinking her head in dejection : the Britain that had revolted against Antoninus and been brought to subjection is here



BRITANNIA (and allied types)
Scale $\frac{1}{2}$

BRITANNIA

marked by delicate touches as a 'provincia capta'. The medallion of Commodus (PLATE, no. 5) is a magnificent rendering of the 'Genius' type of Antoninus Pius. The As of Septimius Severus (PLATE, no. 8) shows a Victory, marked as British, by two little figures of captive natives, symbolizing the island. Carausius has no certain representation of Britannia on his coins, but the uncouth little figure of a woman, holding the caduceus of Felicitas, who welcomes Carausius, on the silver coin with the legend 'Expectate veni' (PLATE, no. 9) may represent a 'Britannia Felix'. The restoration of Britain, after the overthrow of the tyranny by Constantius Chlorus, is the theme of some magnificent medallions, only recently restored to light in the Arras Hoard. On one (PLATE, no. 10) the victorious Constantius rides up to the gates of a city, in front of which a kneeling woman (Londinium) appeals to his mercy: on the water below him rides a war-ship with its crew. The terms in which Londinium welcomes the Emperor are suggested by the legend, 'Hail, O thou who bringest back to us the eternal light of Rome' (*Redditor lucis aeternae*). The other (PLATE, no. 11) shows the victorious Constantius expressing in action the 'Pietas Augg.' or 'loving-kindness (pity) of the Emperor' by extending his hand to raise Britannia to her feet: she is a woman, wearing a robe to her ankles, and she holds a spear and oblong shield, not the great round shield of earlier types. The last personification of Britain that we can quote from Roman times is a literary, not an artistic type, freely embroidered by the author's fancy. Britannia, who appears to swell the praises of Stilicho, wears on her head the spoils of a Caledonian monster, her cheeks are stained with woad, and her long robe, blue with the blue of ocean, sweeps her feet:

'inde Caledonio velata Britannia monstro,
ferro picta genas, cuius vestigia verrit
caerulus, Oceanique aestum mentitur, amictus'.

—Claudian, *De Laudibus Stilichonis*, II, vv. 247ff.

Up to the last there is uncertainty both as to the garb and to the attributes of Britannia—an uncertainty that suggests that to the Romans as to us she was an object of the imagination, rather than a fully realized goddess.

The Britannia type in modern times show a similar uncertainty. The gracious woman of the halfpenny of Charles II (PLATE, no. 12), said to be a portrait of Frances Stewart, Duchess of Richmond, is a Britannia who combines the emblems of war, spear and shield, with the branch of Peace; the idea is that of a 'Minerva Pacifera', but the helmet of the goddess is missing. The figure reappears on the farthing

ANTIQUITY

of Anne (PLATE, no. 13) and the halfpenny of William III (PLATE, no. 15) —this time in a slightly different pose. The Pax of another pattern farthing of Anne is essentially the same figure. On the penny of George III (1799), the spear gave place to the trident: the emblem of Neptune was now for the first time claimed for the island kingdom. Then, early in the reign of George IV (1825), were evolved the Britannia types familiar to us. The goddess retained the shield and the trident, but was now set towards right instead of left, and received a helmet on her head. She is now, as Professor Ashmole has observed, a very close adaptation of the Roman type of Roma as a city-goddess like Minerva, with spear and shield: she is quite unlike any Roman conception of Britannia and is only distinguished from a typical Roma by the trident in place of spear and the cross on the shield. A lighthouse was introduced on the penny of Victoria in 1860, and continued on it till 1894. This Britannia is gracefully conceived and designed in the classical tradition: the worst one can say of her is that that tradition is neither native to us nor vital today. Ought we rather to seek our own forms of representation in some such way as the Irish Free State with its thorough-bred horse, salmon, pig and hen? But this is a question that would lead us too far beyond the limits of this paper.

LIST OF 'BRITANNIA' AND ALLIED TYPES

(Plate, facing p. 392)

1. Sestertius of Hadrian, struck *c.* A.D. 135.
2. Sestertius of Antoninus Pius, struck *c.* 142.
3. Sestertius of Antoninus Pius, struck *c.* 143.
4. As of Hadrian, struck *c.* 119.
5. Bronze Medallion of Commodus, struck 184–185.
6. As of Hadrian, struck *c.* 135.
7. As of Antoninus Pius, struck 154–155.
8. As of Septimius Severus, struck 211.
9. Silver of Carausius, struck *c.* 188.
10. } Gold medallions of Constantius Chlorus, struck *c.* 296.
11. }
12. Halfpenny of Charles II, 1670.
13. Farthing of Anne, 1714.
14. Farthing (pattern) of Anne, 1713.
15. Halfpenny of William III, 1699.
16. Penny of George III, 1807.
17. Penny of George IV, 1825.
18. Penny of Victoria, 1860.

Forts and Farms on Margam Mountain

Glamorgan

by CYRIL and AILEEN FOX

THE progress of archaeology in Britain, as elsewhere, depends on excavation. This is a commonplace ; but a more leisurely approach to that final arbitrament than is usually adopted would, we think, be advantageous. Until an area is studied, its visible antiquities planned, the evidence afforded by their geographical and topographical relationships weighed, the natural environmental conditions—forest and open country—assessed, and resultant possibilities discussed, the selection of particular sites for excavation in that area is premature. The following account of a field survey of a limited area in Glamorgan is a practical expression of this point of view.

Margam Mountain is a convenient title for an upland region the highest part of which is called Mynydd Margam, measuring 8 miles along its main axis (SE to NW) and 4 miles across. It is on the southern fringe of the Glamorgan coalfield, with steep slopes overlooking a narrow coastal flat to the southeast of the industrial town of Port Talbot (FIG. 1). On the northeast it is defined by the valley of the Llynfi, a tributary of the river Ogmore (Ogwr) and on the northwest by a ravine known as Cwm Dyffryn. On the north, the steep scarp of Mynydd Bach fronts the saddle which separates Cwm Dyffryn from the Llynfi valley. This saddle (800 ft.) is the only link between Margam Mountain and the Glamorgan plateau.

On all sides the outline of the massif is indented by ravines and *cwms*, each with its small stream rising in boggy ground near the crest. Thus, though the main ridge, which rises gradually from 800 feet in the southeast to over 1100 feet in the northwest, is unbroken, there are many subsidiary hill-tops and spurs on either flank. The area over 1000 feet is a featureless and monotonous plateau showing the limited flora normal to the poor and thin soils of the Pennant Series. At the lower levels the landscape is more varied, the soil less infertile.

ANTIQUITY

To prehistoric man the poverty of the soil of the plateau would be offset by its open character, and several large cairns and barrows sited on crest-lines in the Bronze Age manner suggest some occupation in that period. One of these, Twmpath Diwlith, was opened by Dr R. E. M. Wheeler in 1921,¹ and a simple burial in a cist disclosed. The lower slopes, on the southwest side, show a contour fort of La Tène character encircling a knoll at the 300 feet level; this illustrates the Celtic penetration of the coastal plain of Glamorgan prior to the Roman conquest, of which we have both historical and archaeological evidence. No fortress of this type, however, is to be seen on the mountain itself, and its effective occupation seems to have been reserved for a later phase of culture, which is the subject of our paper. Most of the remains of this occupation lie in the centre—an area measuring 3 by 2 miles shown on the large scale map (FIG. 2),² to which our survey will be confined. On this map are shown three forts, half-a-dozen domestic sites, and the trackways which linked them; together with barrows probably for the most part prehistoric, a small ring-work,³ and a keep-and-bailey castle. None of the forts has been previously described, and the plans on the O.S. maps are inadequate. The majority of the domestic sites are unrecorded; they seem to represent types new to archaeological science.

The extent of habitable open country or parkland in relation to the envioning forest and its accessibility from other similar areas, were prime economic factors in early times, determining the distribution of human settlement. In our area the valley floors were certainly dense jungle, and the sides of the *cwm*s thickly wooded. The ridges and crests, on the other hand, were open; along the spurs grassland changed to parkland, parkland to forest, as, in the descent to lower levels, soils improved and the sea winds' force was lessened. These considerations determine the extent of forest which we have shown on the map.⁴ On the plateau there were peat bogs, and the country was exposed and bleak especially in winter; it is on the whole probable that the upper slopes on either side were the zones most suitable for habitation and for a primitive agriculture. Most of the sites to be

¹ *Bulletin*, Board of Celtic Studies, I, p. 66.

² Parts of 6 inch sheets 25 SE, 26 SW, 33 NE, 34 NW, Glamorgan.

³ This nameless work, on Moel Ton Mawr, has been ploughed down, and shows no features of interest.

⁴ Much of the steep slopes and lower levels of the mountain are woodland today.

FORTS AND FARMS ON MARGAM MOUNTAIN

described are on north or northeast slopes ; shelter from the prevailing rain-laden southwest winds was probably the determining factor.

COMMUNICATIONS

These centre on Rhyd Blaen y Cwm—the 'Ford at the Head of the Combe', down which the river Kenfig flows. To east and west

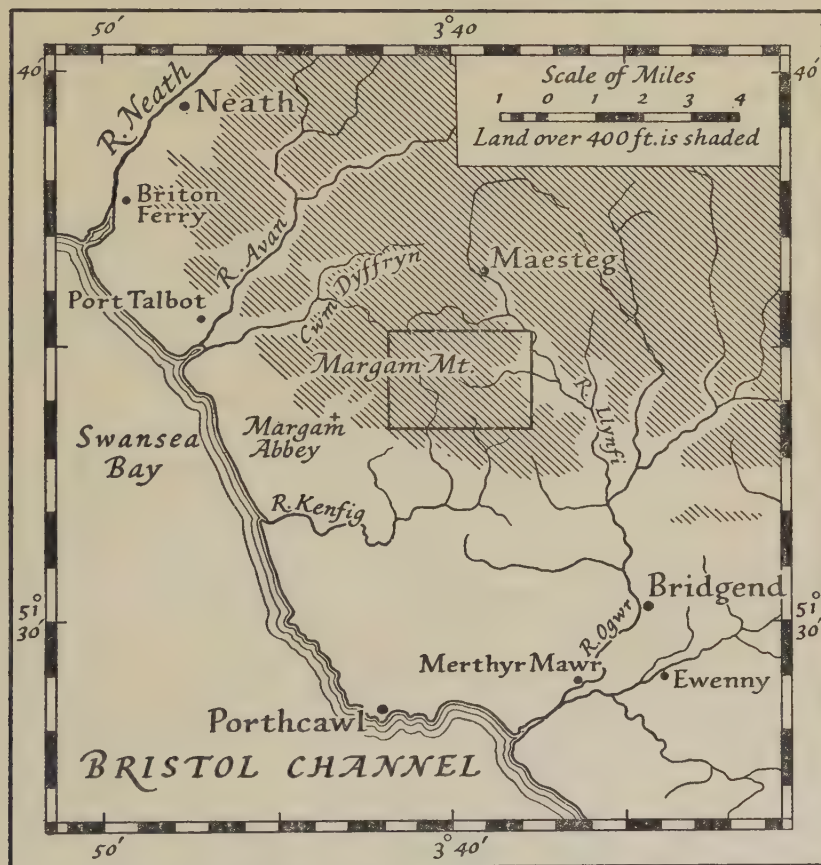


FIG. 1. MARGAM MOUNTAIN : THE GEOGRAPHICAL SETTING
Land above 400 feet is shaded, and the area shown in fig. 2 defined by a rectangle

from this ford trackways follow the main axis of the mountain ; to the south an ancient way descends by Moel Ton Mawr to the sea plain, where occupation of sandhills and limestone downlands had been heavy since neolithic times. To the northwest the chief route to the high

ANTIQUITY

plateau of Glamorgan crosses Mynydd Margam at 1120 feet. Tracks to the northeast making for the Llynfi valley⁴ may be later than those hitherto described, but were certainly in use early in the historic period. In addition, byways link many of the constructions now to be considered with the main routes. Much of this system is in intermittent use today ; in part it has been disused for centuries, and is represented by narrow sinuous depressions partly filled with peaty growth. It should be added that very heavy traffic resulting from the early (medieval and later) exploitation of coal in the Llynfi valley has in many places created bundles of deep hollow-ways on the slopes of the mountain (marked as 'Intrenchments' on the 6 inch O.S. maps).

THE FORTS

The large fortification of Y BWLWARCAU (The Bulwarks) will first be considered. It is situated (FIG. 2) on a broad spur of Mynydd Margam which trends northeast. On the northwest side of the spur the ground falls steeply to a ravine, Cwm Cerdin. To the southeast the spur is less well defined and there is a considerable breadth of level ground ; to the southwest it rises fairly steeply to the main ridge of the mountain. A trackway to the Llynfi valley passes by the fort.

Y Bwlwarcau has analogies to the 'hill-slope' type of camp,⁵ with its difference of 100 feet vertical between the outermost defences at the upper and lower sides. It is between 850 and 950 feet above sea level.

Four concentric zones of earthwork can be distinguished in its structure. The core of the fortress is a gently-sloping roughly rectangular area, about 60 by 50 yards, surrounded by a bank and (outer) ditch, which is largest on the side which faces uphill. There is a small counterscarp bank to the ditch. The overall measurement is about 35 ft. ; the rampart 3 ft. high, the counterscarp bank 1.5 ft. Separated from these defences on the southwest and southeast sides by a berm some 10 yards wide is the second zone of defence—bank, ditch, and counterscarp bank ; this, on the lower (northeast) side approaches and finally merges with, the inner defences. Here is the original entrance,

⁴ They form part of an ancient system of ways along the foothills.

⁵ This type is common in South Wales, and was figured and described by Col. Ll. Morgan in 1920. The upper defences—the strongest—are usually on the edge of a ridge or plateau. The entrance is on the lower side. The type appears to illustrate a phase of the movement of population from the hill crests to the valley floors. See *Arch. Camb.*, 1920, Ser. 6, xx, 220-222.

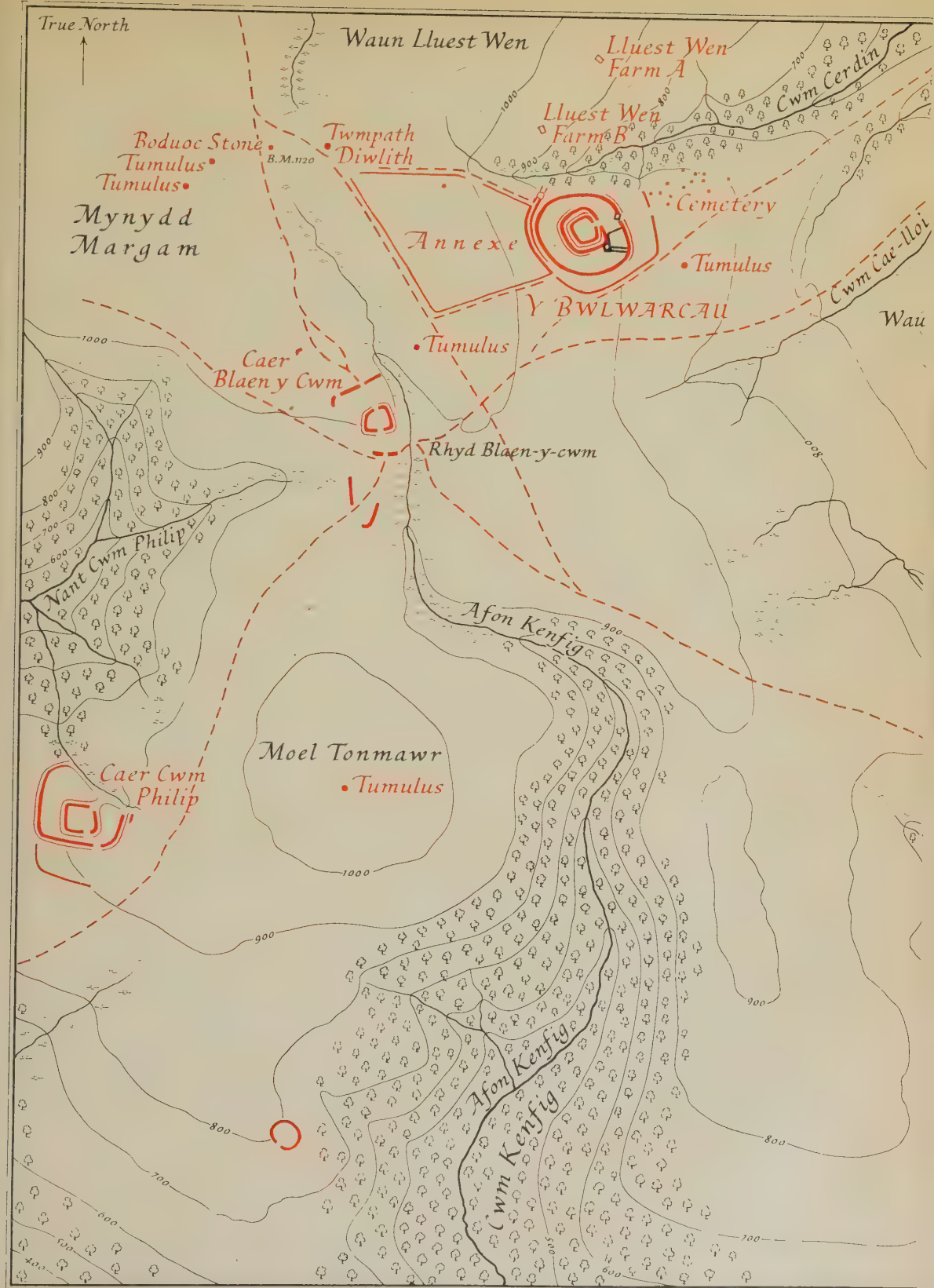


Fig. 2. MARGAM MOUND

The Central Portion of
MARGAM MOUNTAIN
 showing probable distribution of forest
 and open country in early historic times

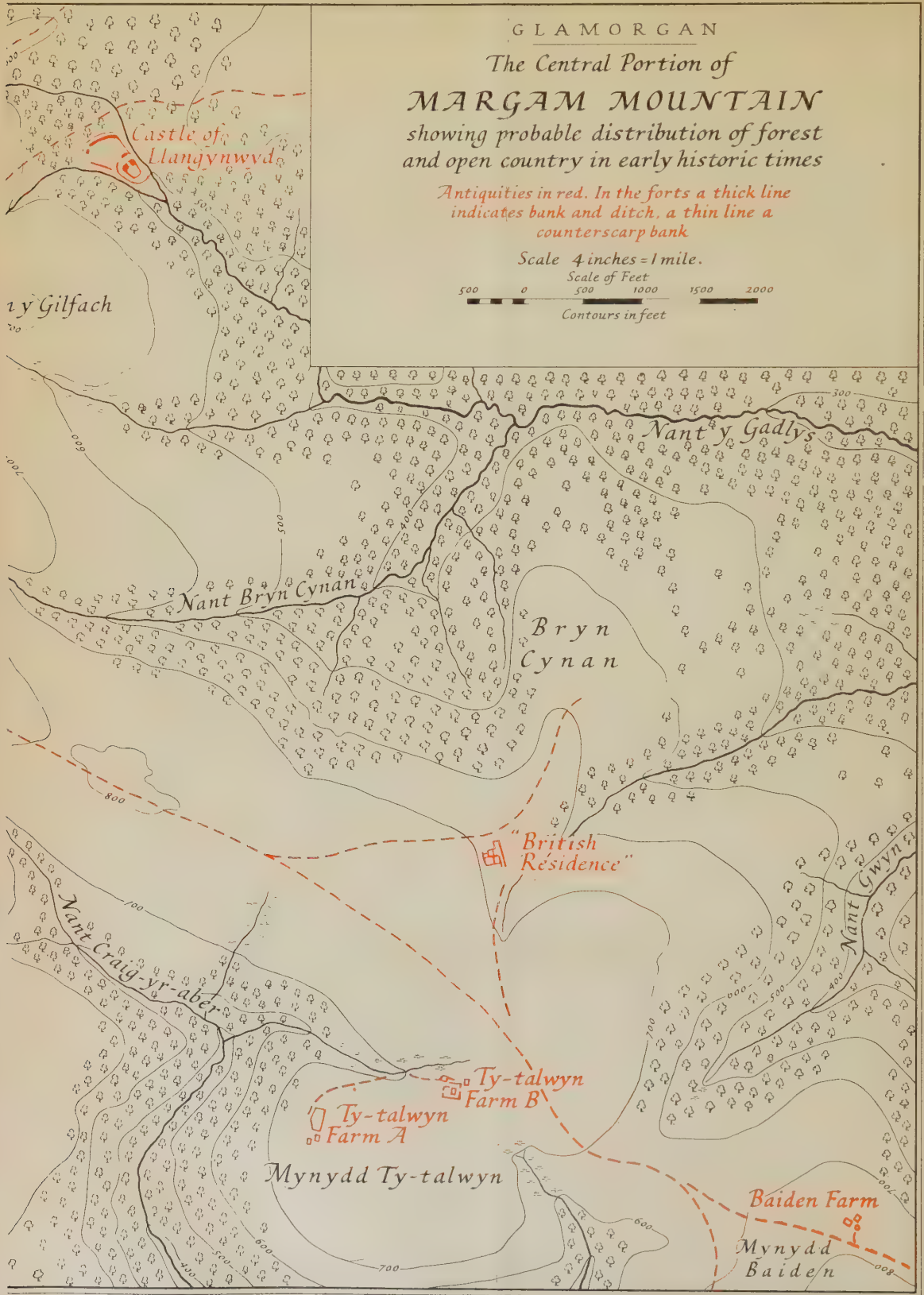
Antiquities in red. In the forts a thick line indicates bank and ditch, a thin line a counterscarp bank

Scale 4 inches = 1 mile.

Scale of Feet

500 0 500 1000 1500 2000

Contours in feet



FORTS AND FARMS ON MARGAM MOUNTAIN

a simple gap in the earthwork. A trackway worn into a shallow hollow is clearly visible passing from it down the spur.

Around the main fortress are earthworks of slighter character, normally consisting of a bank and outer ditch. The nearest—defining the Middle Enclosure—encircles it at a fairly regular distance (average 60 yards). The original entrance is in line with that of the fortress; one of its flanks is slightly recurved. On either side of the entrance this work is larger than elsewhere, and has a counterscarp bank.

The Outer Enclosure—a very irregular work—surrounds the middle enclosure on three sides at varying distances; it is 70 yards away on the northeast (lower) side while on the southwest (upper) side it is in one place so close as almost to form with it a single constructional unit. The banks of this enclosure fade out on the scarp of Cwm Cerdin; the ravine thus forms the boundary on the north side. On the west the Outer Enclosure shows exceptional features, developing a double bank with outer and middle ditches (overall breadth, 44 ft.): these may be said to form a definite military obstacle. The outer bank has here an opening, splayed outwards and apparently original, giving access to a convenient route up to Mynydd Margam along the flank of the Cwm; the existence of this traffic-way provides a reason for the adjacent defences. Behind this entrance, however, the second bank of the Outer Enclosure was continuous. Another gap on this side, shown on the Map, is probably secondary. On the northeast side, adjacent to the 'cemetery' (a group of small mounds possibly contemporary), the bank of the Outer Enclosure is ploughed down. No entrance can be detected here, but there must have been one in line with the others.

Such is the remarkable fortification of Y Bwlwarcau, elaborate and extensive, but planned on simple and consistent lines. The situation of its main entrance suggests that the interests of its occupiers lay downhill rather than uphill. The concentric enclosures which are a striking feature of its lay-out can only have been needed by a community whose chief business was stock raising; they were doubtless palisaded, and provided protection against wolves and other predatory animals.

An addition to the original structure of Y Bwlwarcau needs brief reference. This is a very large polygonal Annex (two sides of which are parish boundaries), defined by a turf bank and broad, flat outer ditch, based on the Outer Enclosure and extending uphill for over half-a-mile to the plateau (about 1100 ft. above sea level). The north-west-southeast ridgeway which passes by it was straightened and has

ANTIQUITY

ever since followed the ditch of the Annex, its older sinuous course being still traceable. The age of the Annex is uncertain. The same may be said of a large cattle-pond (diameter 61 ft.) cut in and across the double banks of the Outer Enclosure near Cwm Cerdin, and fed by drainage from their ditches.

The two other forts, which may conveniently be called CAER BLAEN Y CWM and CAER CWM PHILIP, lie on the south side of the mountain, at 1000 ft. and 900 ft.⁶ respectively. These forts, as FIG. 2 shows, are remarkably similar to Y Bwlwarcau. Each consists of an inner enclosure, roughly rectangular, with outer enclosure of slighter character; one side of the latter rests on a streamlet or ravine. In

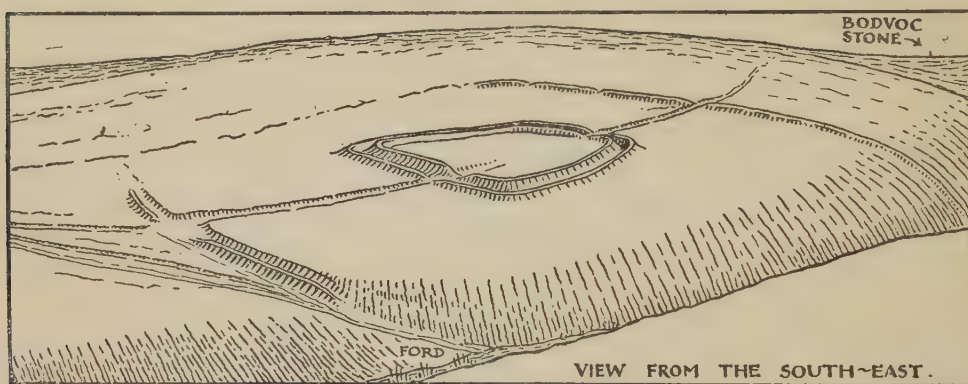


FIG 3. CAER BLAEN Y CWM. By Dr R. E. M. Wheeler, F.S.A.

each the defences of the inner enclosure consist of a bank, ditch, and counterscarp bank, and are strongest on the side facing uphill. The entrances are simple gaps. It is probable that one of these forts, Caer Blaen y Cwm, owes its existence to its position at the traffic centre of the mountain; so exposed a site would hardly be chosen for economic reasons. We owe the admirable bird's-eye view of this fort (FIG. 3) to the courtesy of Dr R. E. M. Wheeler.

The resemblances justify the conclusion that all three forts are approximately contemporary. To what period are we to assign them? They resemble in some respects, as we have seen, 'hill-slope' camps, which are late in the development of hill-fort design in this country.

⁶ Caer Cwm Philip is nameless on the o.s. map. Caer Blaen y Cwm is called 'Roman Camp'—a title imposed on it in the late 19th century.



FIG. 4. THE BODVOC STONE, MARGAM MOUNTAIN, GLAMORGAN. 1120 FEET ABOVE O.D.
Ph, National Museum of Wales

FORTS AND FARMS ON MARGAM MOUNTAIN

Again, they seem to us to show degeneration in the technique of defensive earthwork. The crude rectangularity, then, of the inner enclosures can reasonably be ascribed to Roman influence and the earthworks placed provisionally in the sub-Roman period.⁷

THE BODVOC STONE

Attention may now be directed to a remarkable monument, the BODVOC STONE (FIG. 4) referred to by Camden.⁸ It is exactly placed on the watershed of Mynydd Margam (1120 ft.) where traffic crossed it, above the source of the river Kenfig. It is in the centre of a low barrow, the rim only of which remains; and is, we are convinced, in its original position. The inscription is in well-cut Roman capitals of normal type—except the letters H and G, two of the final I's which are horizontal, and all the A's which are upsidedown:—

BODVOC — HIC IVCIT
FILIVS CVTOTIGIRNI
PRONEPVS ETERNVLI
VEDOMVV —

(The stone of) Bodvoc: here lies
the son of Catotigirnus, great-grandson
of Eternalis Vedomavus.

Here we have record of three generations, surely of a royal or princely Celtic dynasty with some Roman traditions, illustrated by the name Eternalis. The character of the lettering suggests that the stone was set up about A.D. 550. It seems probable then that the forts on Margam Mountain, representing a resumption of the pre-Roman (Celtic) mode of life in defended settlements, are to be related to the existence of this dynasty, whose founder (Eternalis) would appear to have been born at the very end of the Roman occupation.⁹

⁷ Dr Wheeler tells us he came to this conclusion in 1921 with respect to *Caer Blaen y Cwm*.

⁸ 'A sepulchral Monument, with an Inscription, which whoever happens to read, the ignorant common people of the neighbourhood affirm that he shall die soon after. Let the Reader therefore take heed what he does!' Camden, ed. Gibson, II, 738.

⁹ See Sir John Rhys in *Y Cymmrodor*, 1905, XVIII, 79. This author gave reasons for regarding Vedomavi [= Vedomagui] as a place-name, the termination *-magus* or *-magos* (field) being as is well known, of common occurrence in Celtic Europe. But we are assured that the philological difficulties which beset this interpretation are serious, and the temptation to equate *Y Bwlwarcaw* with Vedomagus must be resisted. Undoubted double names occur in contemporary inscriptions, e.g. the Turpillius stone at Crickhowell, Brecon, *loc. cit.*, p. 95.

ANTIQUITY

THE FARMS

Y BWLWARCAU. On FIG. 2 there are certain intrusive constructions (shown in black for effective contrast) in the Middle Enclosure of

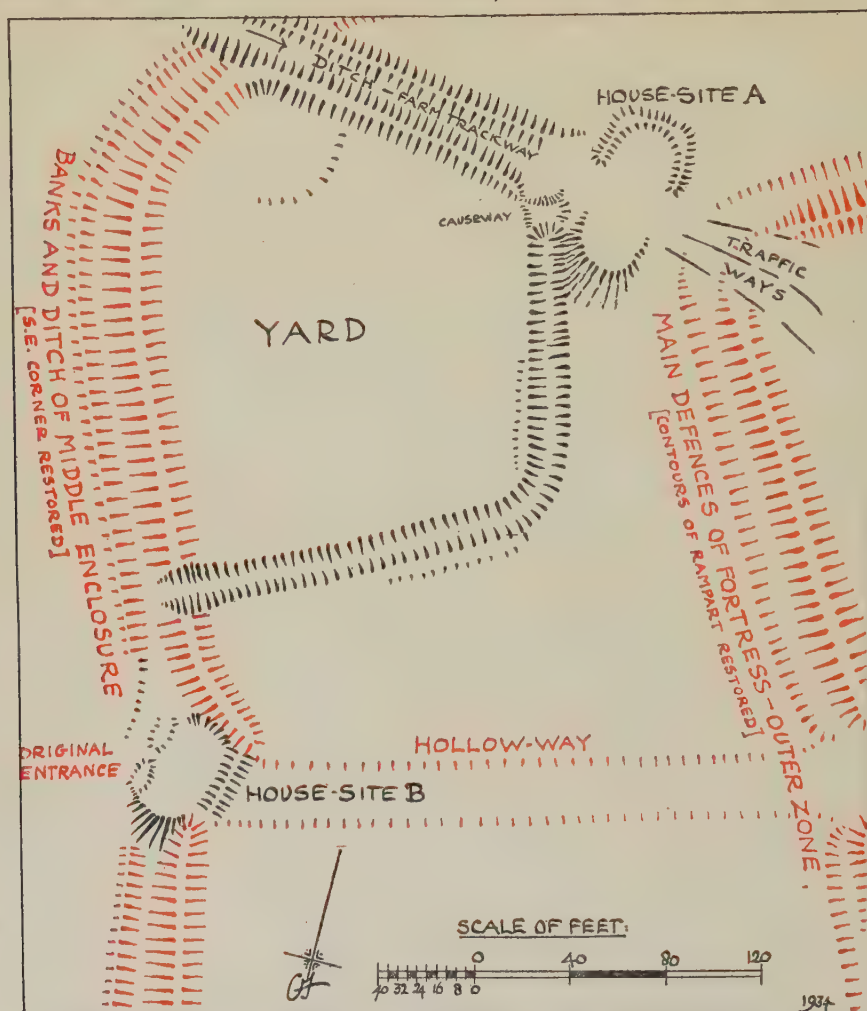


FIG. 5. FARM, IN A CORNER OF Y BWLWARCAU FORT, 900 FEET ABOVE O.D.
SKETCH PLAN WITH LATER FIELD-BANKS OMITTED

In this and all succeeding plans, the ground slopes downwards from the top

Y Bwlwarcau ; their character is more clearly brought out in FIG. 5. They consist of two 'platforms' and a quadrangular yard. The most

FORTS AND FARMS ON MARGAM MOUNTAIN

southerly—House-site A on plan—is roughly levelled up at the north end and shows an artificial scarp ; the south end is defined by a broad, low semicircular bank. The area enclosed measures 59×24 ft. The second ' platform ' is similar, but smaller, 41×22 ft. ; it bestrides the gap in the Middle Enclosure which was the main entrance to Y Bwlwarcau. The fort ditch has been filled in, and the slightly recurved rampart hollowed-out a little to give protection on the southwest—the windward side. The yard is based on the fort rampart and is defined by ditches on two sides, and by a double bank with intervening ditch on the third ; it measures some 40 yards square. Communication between the two platforms was apparently by a newly-cut gap in the Middle Enclosure bank and the north ditch of the yard ; access to the yard from the southern platform was by a low causeway. The south ditch of the yard was also used as a traffic-way.

The blocking of the main entrance and the partial levelling of the defences of the fort indicate a lowering of the social standard of the occupants of Y Bwlwarcau. Indeed, a desertion of the fortress proper, followed by a casual intrusion, seems the most likely interpretation of these secondary works. Before, however, we endeavour to interpret them, we shall do well to examine several other similar or related constructions on the mountain.

BAIDEN. Towards the east end of the main ridge, about $2\frac{1}{2}$ miles distant from Y Bwlwarcau, there is a small complex of earthworks (marked ' Camp ' on 6 inch O.S., 34 NW) on the north slope of the hill called Mynydd Baiden, 750 feet above sea-level and close to the east-west ridgeway. As FIG. 6 shows, it consists of a pair of rectangular structures, a pond, and approach trackways.

The site lowest down the slope (House 1) first attracts attention because it is similar to those at Y Bwlwarcau. It stands southwest-northeast, and to obtain a level area the hillside has been dug out and the material thrown downhill to form a flat rectangular platform, as is shown on the section C-D. This is more level, cleaner cut with sharper angles, than those at the fortress, and has on it—in the form of low banks—the foundations of the actual building which it carried. This building had two doorways, central and opposite, and measured about 50 by 20 feet.¹⁰ Flanking the foundation wall on either side are banks, gapped for the entrances to the building. These end, as FIG. 6 shows, where the slope of the artificial platform and where the scarp of the quarried hillside begin.

¹⁰ For exact measurements of this and other sites, see Appendix.

ANTIQUITY

The second site (House II) lies above and at right angles to the former, southeast and northwest along the contour of the hill; there is thus no artificial platform. It is slightly smaller and the same low

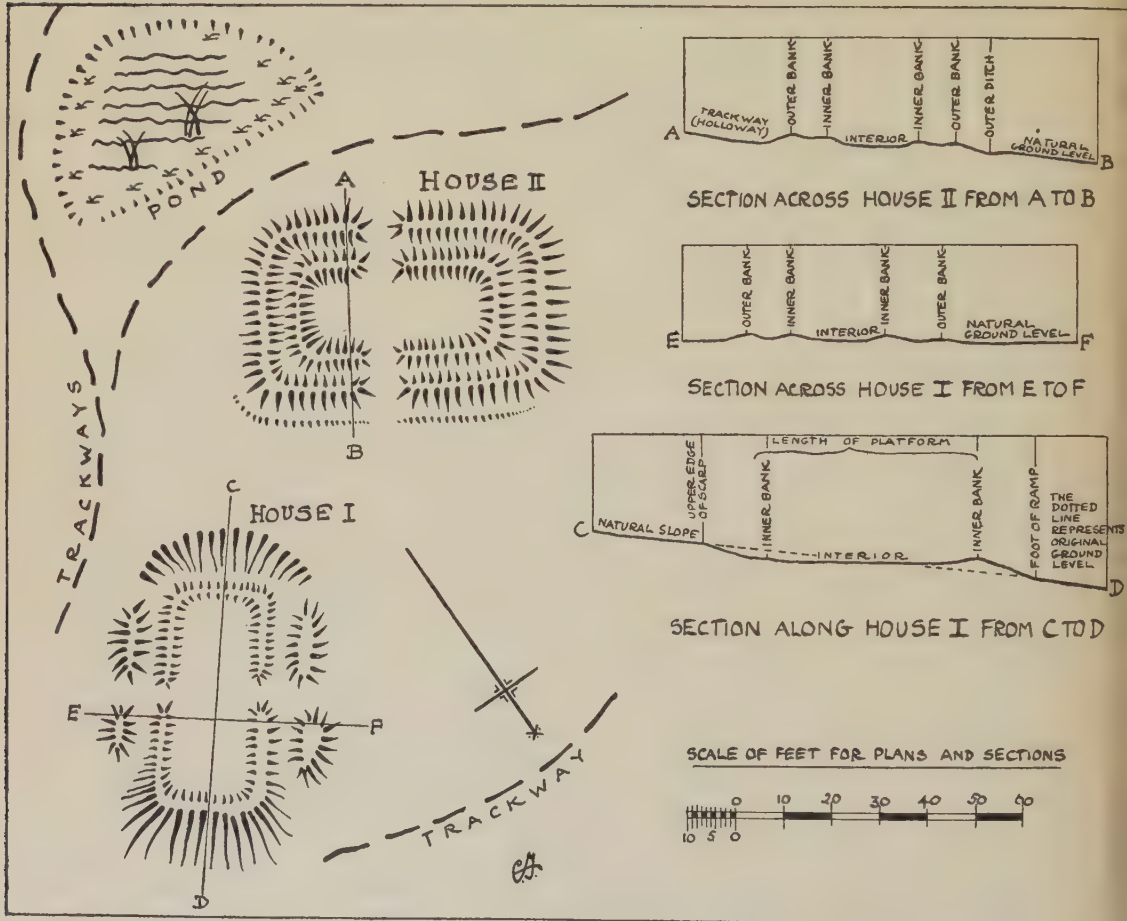


FIG. 6. BAIDEN FARM, 750 FEET. SKETCH PLAN, WITH EXACT PROFILES
This and all succeeding plans are on the same scale, double that in the preceding figure

earthen bank and the same central and opposite doorways are present. But the most striking feature of the plan is a second bank close to and parallel with the house-wall, and with similar openings. The function which necessitated the construction of an *incomplete* external bank in

FORTS AND FARMS ON MARGAM MOUNTAIN

House I seems to have necessitated the construction of a *complete* bank in House II ! This site shows that a pair of buildings, as at Y Bwlwarcau, is a normal unit for these structures.

TY TALWYN A. A short mile to the west, on an easy north slope near the crest of Mynydd Ty Talwyn, about 750 feet above sea level, is a site which provides even closer parallels to Y Bwlwarcau than does that at Baiden (see FIG. 7). There are, as usual, the remains of two buildings. House I, the larger, lies south and north. Its platform is artificial, cut out of the hillside on the south and banked up on the north, like House II at Baiden. It has opposite entrances, with an outer flanking bank ; this goes right round the top of the house-site like a protective hood : the hood resembles that at House site I at Y Bwlwarcau, except that it is more angular. House II, ten yards away, is smaller, and poorly defined. Its outer banks, if it had any, were too faint for recognition.

We noted that a feature of the Y Bwlwarcau group is the yard abutting on one of the house sites. Ty Talwyn A has a similar structure, abutting on House I. It is banked, with outer ditch, but of very slight relief (12 feet overall). It will be recalled that the ditches of the Y Bwlwarcau yard were used as approach ways. The same usage is apparent at Ty Talwyn. A trackway leads diagonally from the bottom of the little valley to the northwest angle of the yard, and thence proceeds uphill along its west ditch to the steading. The valley floor it may be added, is now boggy, and would then have given an ample water supply. Thus cultural unity between the builders of these isolated structures and those in the wrecked fortress of Y Bwlwarcau is established.

TY TALWYN B. The last of our four sites is on the north side of the Mynydd, on gently sloping ground nearer to the head of the little glen than that just described. It has a yard within which one of the usual two structures is situated. This is large, well defined, with opposite doorways, and has no outer banks. The yard, as FIG. 8 shows, is roughly rectangular, with four entrances. The enclosing banks are low, shapeless and massive, evidently representing earthen walls with a facing of stones, a type still of common occurrence in this district. On the south side these banks present a steep scarp ; this is because the hillside has been cut away to make the interior more level. The yard thus carries out the same idea as the platforms, but on a larger scale.

The second house-site is a small and poorly defined platform

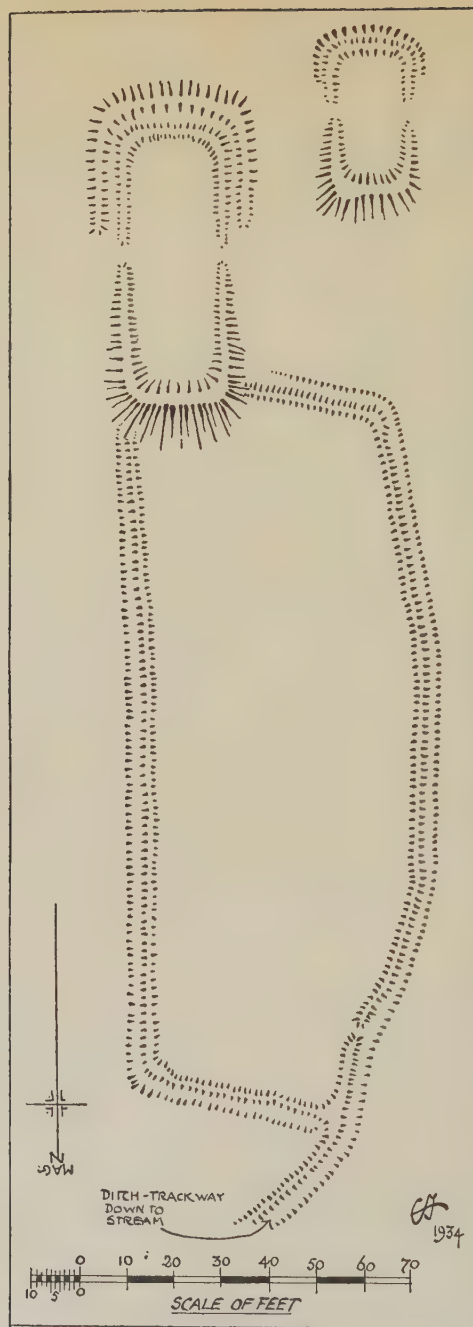


FIG 7. TY TALWYN FARM A. 750 FEET ABOVE O.D.
SKETCH PLAN

FORTS AND FARMS ON MARGAM MOUNTAIN

outside the northeast corner of the yard. A hollow-way, as at Ty Talwyn A, leads downhill to the rivulet ; a water-hole has been at some later date dug in it.

THE CHARACTER OF THE FARMS

We have described four groups of earthworks in each of which the site of a pair of buildings is apparent. We think that this duality provides the clue to their meaning, suggesting separate shelters for man and for beast ; we have in fact four primitive farmsteads. The enclosure-yard, present at three out of the four, conforms to this interpretation, while the narrow hollow-ways suggest stock-raising as the chief activity of the farmers. The scattered distribution of the farms on the mountain is also consistent with pastoral economy, each farmer having a sufficient area of grazing.¹¹

On this assumption an analysis of the lay-outs provides interesting data. Of the eight buildings all but one are sited south and north or southeast and northwest down the hill-slope, and placed on artificial platforms. Of each pair, one building is larger, usually much larger, than the other (see Appendix). Where there is a yard the larger building is either close up against it, or within it. Where the two buildings are in close proximity on the hillside (Baiden and Ty Talwyn A) the smaller is above the larger. We can thus tentatively identify the larger as the barn or byre, the smaller as the dwelling of the owner.

Turning to constructional problems : the low banks visible today are likely to represent plinths or sills of turf in some cases, ruined walls of earth with stone revetment in others. On the turf sills, posts and wall-plates could be erected and the interspaces interwoven with wattle ; we may surmise, for all, roofs thatched with heather or bracken.

At Y Bwlwarcau, where foundation banks are not present, the structures on the platforms were probably more primitive. There was no sill or plinth—the posts doubtless were bedded in the ground ; but the outward appearance was probably very similar. There are two farm sites near Y Bwlwarcau, on the opposite slope of Cwm Cerdin

¹¹ The possibility that the sites are sheepfolds, both yards and buildings serving solely pastoral purposes, has been suggested to us by Mr Iorwerth Peate. Mr Peate has discovered an enclosure in Montgomeryshire larger than, but closely resembling, the yard of Ty Talwyn B. The hillside is known as *Banc y Gorlan*, the sheep-fold slope ; and there is a sheep-washing pool in use today. But nothing resembling the Margam platforms or double-banked structures has been found ; and we think that for the purpose of a Field Survey the term ' Farms ' for our structures should stand.

ANTIQUITY

(see FIG. 2), which should here be mentioned. The artificial ramp of each platform is well marked, the hillside deeply cut into as at Baiden and Ty

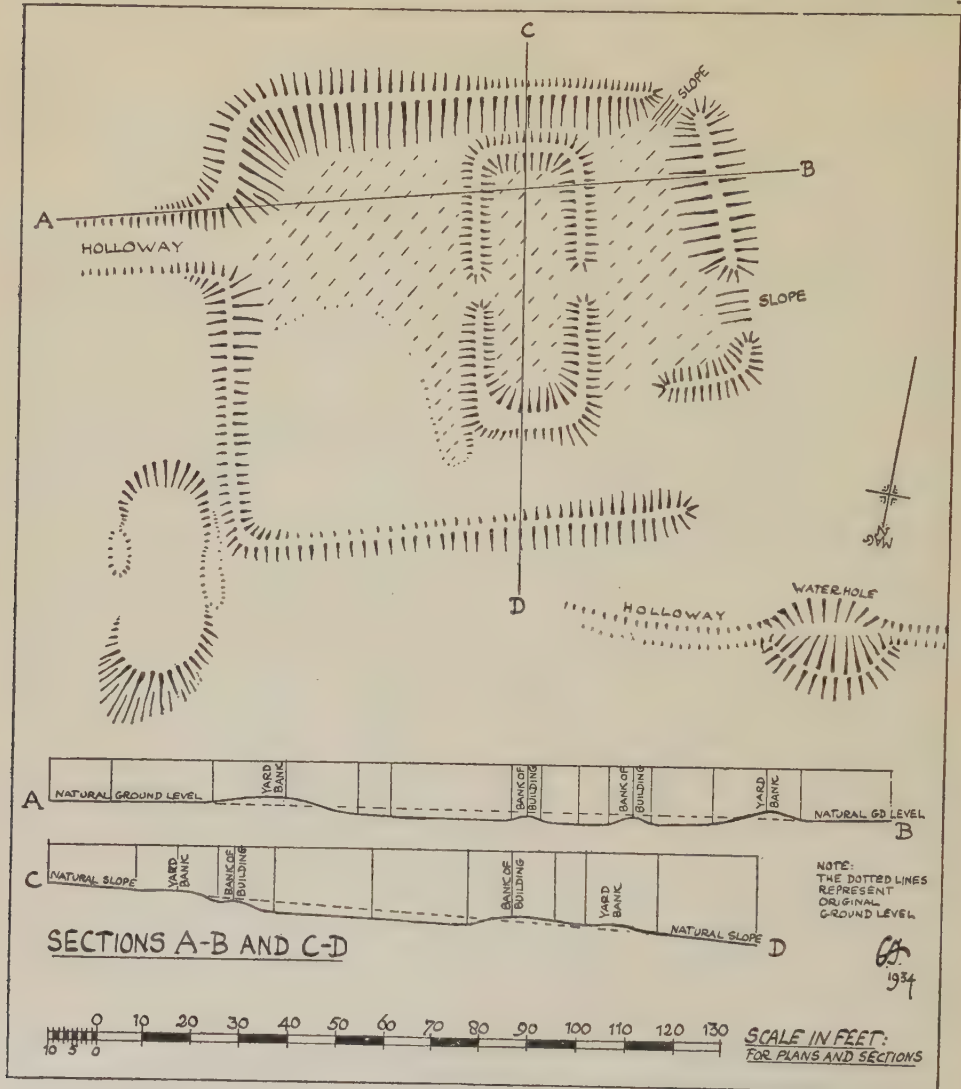


FIG. 8. TY TALWYN FARM B. 720 FEET ABOVE O.D. SKETCH PLAN WITH EXACT PROFILES
The stippling within the enclosure shows the area excavated

Talwyn A ; but the foundation banks are absent as at Y Bwlwarcau.
The outer banks in one form or another in the larger buildings at

FORTS AND FARMS ON MARGAM MOUNTAIN

Baiden and Ty Talwyn A present a problem which we have hitherto disregarded. They cannot have been supports for roof timbers extending outside and below the main walls, because such banks would be needed at the lower ends of the platforms where they do not occur, as much as at the upper ends. We suggest that they are in some sense protective against the weather (rain and flood-water) rather than against the depredations—thatch-eating propensities—of cattle. This view receives support from Ty Talwyn B. The larger building here has no outer bank, because it was protected by the banks of the yard on the upper side (FIG. 8). Excavation would quickly throw light on this and other constructional problems.

THE ' RESIDENCE '

We have seen that the levelling of an area for building is a constant feature of the culture represented by the farms. We can study the application of the principle to a large establishment, in an irregular complex described on the Ordnance Maps by the pompous title of ' British Fortified Residence '. It occupies an area about 50 by 60 yards at 650 feet above O.D., on a hillside facing northeast and about 700 yards to the north of the Ty Talwyn settlements (see FIGS. 2 and 9). In order to secure a level site, the builders quarried a segment of the hillside, making dumps of their unwanted material on the lower slopes. The larger tip is of a bastion-like character, but it was not utilized, the northeast boundary bank of the settlement passing across its margin. The settlement was completely open and unprotected.

There are two entrances. The most important is that on the northwest side. This leads from the existing, and probably ancient, hollow-way, which descends to Nant-y-Gadlys. Moving from this hollow-way towards the site by a depression—the line of the old track—one has on the left ' the Long House ', in part double-banked, and in front ' the Square House '—evidently the main dwelling. This measures some 30 ft. each way and consisted of three rooms. Adjacent to it are two rounded hollows which look like hut-floors, and around it are three enclosures—yards or courts.

The southeast approach to the complex is between two banks which begin on the flank of a small ravine which may have afforded a water supply; it is now (March 1934) dry. This banked approach gives access to the largest of the courts. The adjacent ' High Place ' is curious; it has a steep scarp overlooking three of the courts, but an easy slope outwards. A parapet or low bank bounds it on three sides,

ANTIQUITY

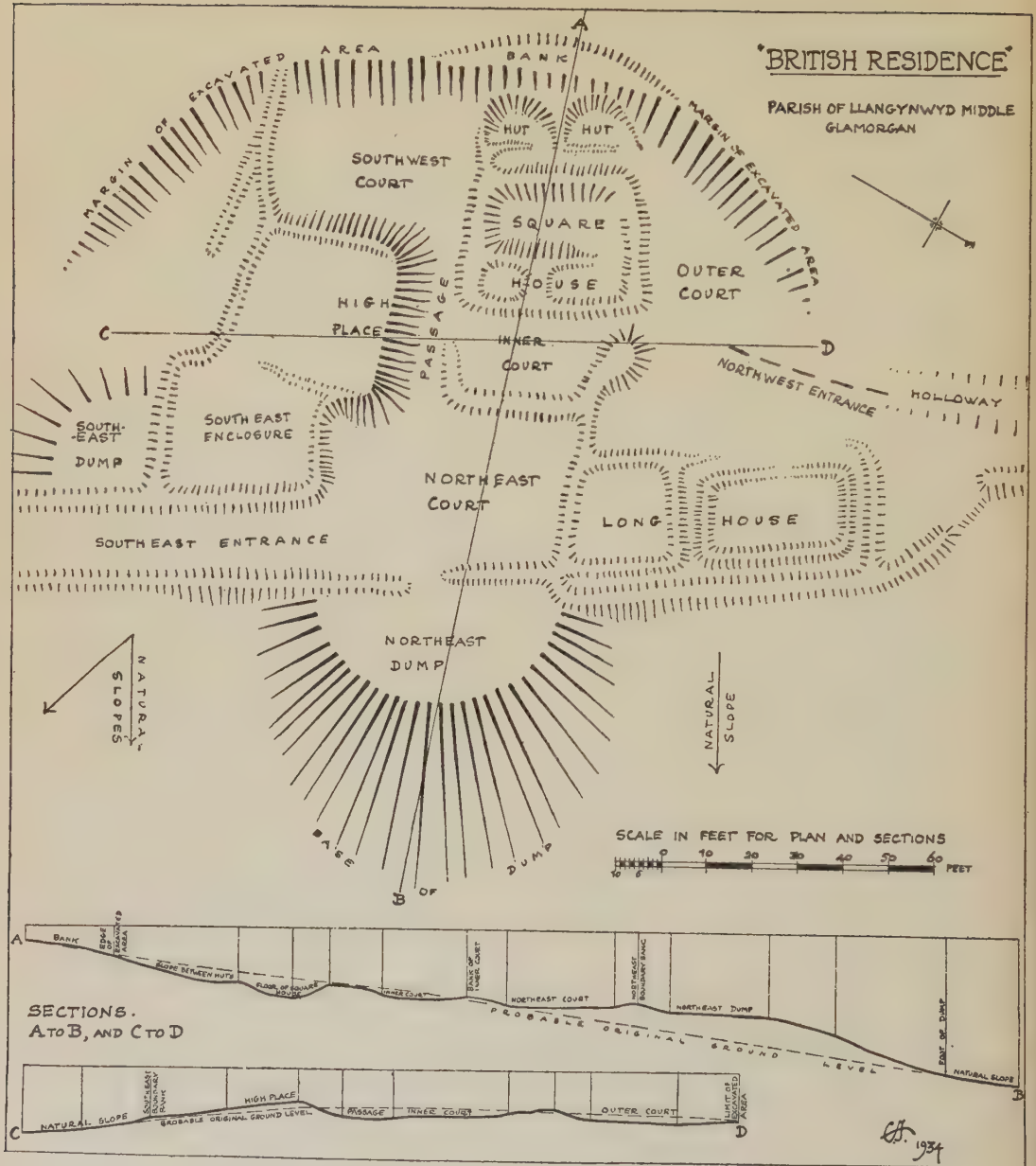


Fig. 9. 'THE RESIDENCE', 650 FEET ABOVE O.D. SKETCH PLAN WITH EXACT PROFILES

FORTS AND FARMS ON MARGAM MOUNTAIN

but it does not appear to have had any buildings on it, and there is no apparent means of access to it. As the section (C-D) shows, it represents an area of unquarried hillside projecting into the quarried area, with perhaps a slight addition of soil. In this connexion we are reminded that the farmyard area of Ty Talwyn B was not wholly levelled down. The boundary banks of the 'Residence' moreover, like the farm-yards and enclosures, are angular and approximately straight-sided, but show irregularity in detail. Another parallel is provided by the rectangular building (part of the 'Long House'), which looks very like House II, Baiden Farm. Its position close to the main entrance is such that the farming activities of the owner of the 'Residence' might well have been centred there. There is an enclosure (cattleyard?) the beginning of which is shown on the plan, extending to the northwest from the 'Long House'. We suggest then that the 'Residence' was in the occupation of a landed proprietor or large farmer contemporaneously with the small farms.

THE DATES OF THE FORTS AND FARMS

We are now in a position to summarize our evidence.

Y Bwlwarcau, like the other forts, is regarded as sub-Roman; it was probably in use in the 6th century, when Bodvoc died. At some subsequent time it ceased to function and farmers settled there, modifying its defences to suit their peaceful purposes. They constructed platforms, for buildings of unknown character.

Other farmers with more elaborate building technique set up similar structures on the mountain, definitely square-ended with opposite doors, some probably of wood on a sill of turf, others stone-walled with earth filling. The idea of a level platform was in one farm applied also to the whole area of a steading, and in the same district to a larger and more ambitious building complex.

What is the latest date for this group of constructions? We can say of one member of the group, the 'Residence', that it is of pre-Norman character. It has no motte, it is not medieval in plan; and a person of the importance of the owner of the 'Residence' in Norman times would be living in a different situation. This latter point can be illustrated in our own area; the castle of the Norman lordship of Tir Iarll (Llangynwyd) is situated in the valley (see FIG. 2). The 'Residence' is, however, not wholly characteristic of the group, and we have considered the possibility that the Farms are summer dwellings (*hafods*) or sheepfolds of comparatively recent date. But no inhabited

ANTIQUITY

sites in Wales known to us or that we can hear of show their peculiar characters, and the culture they represent is ancient enough, it would appear, to have completely died out. A pre-Norman date for the farms, then, is as probable as for the 'Residence'.

We have ample time, from c. A.D. 550, the death of Bodvoc, to c. A.D. 1100, the Normanization of the Llangynwyd district, for the variety of domestic or pastoral buildings and lay-outs under review. The earliest possible date is A.D. 650-750, one or two centuries after Bodvoc; and we think that this date is more likely than a later one,¹² bearing in mind, of course, the possibility of long survival, even into medieval times, of individual structures.

The Forts and Farms on Margam Mountain, then, if our arguments are sound, illustrate the little-known social, cultural and economic life of South Wales in the Dark Ages. The farm buildings, whatever their specific function, are particularly interesting because diligent enquiry has failed to elicit significant parallels in the British Isles or Scandinavia. Their origin cannot therefore, at present, be surmised: but we may not be far wide of the mark if we regard the 'Residence' as a belated expression in the Highlands of the country-house tradition established by the Romans in Lowland Britain. Both Forts and Farms present, in their groups, essential unity of design and function, and must reflect periods of cultural stability.

Finally, our survey has shown that excavations at not less than three sites—Y Bwlwarcau, the 'Residence' and one of the isolated farms—are necessary in order to establish the cultural history of Margam Mountain.

NOTE: Since this paper was written seven farm-steads similar to the above have been discovered by the writers in collaboration with Mr P. Murray Threipland, six on Cefn Gelligaer and one on Cefn Y Brithdir, Glamorgan, at elevations of from 1250 to 1350 feet. On each mountain there is an inscribed stone of the 6th or 7th century. Readers of ANTIQUITY who may know of such structures in other parts of Wales or elsewhere are desired to communicate with the authors.

¹² Local tradition is indeed in favour of an earlier date for the 'Residence'; the Editor has kindly sent us a copy of the testimony of the vicar of Llangynwyd in 1875 concerning it, from the archives of the Ordnance Survey. It is said to have been the dwelling of Cynan, son of St. Cynwyd, the founder of Llangynwyd Church: he flourished at the end of the 6th century. But for Cynwyd, see Baring-Gould & Fisher, *Lives of the British Saints*, I, pp. 274-5.

FORTS AND FARMS ON MARGAM MOUNTAIN

APPENDIX

FARMS ON MARGAM MOUNTAIN : TABLE OF BUILDINGS

All measurements are taken from the centres of the inner banks (where such are present) as being the best available indication of the position of the walls. Otherwise the figures indicate the area of the 'platforms'.

Name		Length	Breadth	Ratio of B. to L.	Orientation
Y Bwlwarcau :	House-site A	59' 0"	24' 0"	1 : 2.5	S-N
„	House-site B	41' 0"	22' 0"	1 : 1.9	S-N
Lluest Wen Farm A,	House-site ..	44' 0"	20' 0"	1 : 2.2	SE-NW
„	Farm B, House-site ..	30' 0"	16' 0"	1 : 1.9	SE-NW
Baiden Farm :	House I ..	49' 6"	19' 9" (1)	1 : 2.5	SW-NE
„	House II ..	41' 6"	19' 0" (2)	1 : 2.2	SE-NW
Ty Talwyn Farm A :	House I ..	56' 0"	21' 0"	1 : 2.7	S-N
„	House II ..	30' 0"	15' 0"	1 : 2	S-N
Ty Talwyn Farm B :	House I ..	57' 0"	21' 6" (3)	1 : 2.7	S-N
„	House II ..	35' 0"	Uncertain		S-N
Residence :	House ..	31' 6"	16' 6"	1 : 1.9	SE-NW

- | | |
|-------------------------------------|--|
| (1) 20' 6" one end 19' 0" the other | } It is difficult to determine the dimensions exactly, and the actual house-walls may have been nearly parallel. |
| (2) 20' 0" „ „ 18' 6" „ „ | |
| (3) 21' 0" „ „ 22' 0" „ „ | |

Archaeology and the State

by GRAHAME CLARK

THE interest of the State in the ancient monuments and civilizations of Britain is recent in origin and limited in extent.¹ It is the purpose of this paper to trace in outline the growth of State interest, the limits of State control at the present time, and the main *lacunae* which appear to exist in the mechanism for the preservation of our national antiquities. Before embarking on this topic it might be well to point out the two chief reasons why, before 1882, the State undertook little or no responsibility within a sphere now generally recognized as the proper concern of any civilized state. In the first place the study of British Archaeology has only within the last fifty years reached a degree of accuracy and discipline worthy of the expenditure of public funds ; it is of the utmost significance in this connexion that the first scientific British archaeologist, General Pitt-Rivers, was appointed as first Inspector of Ancient Monuments under the Act of 1882. Subsequent students of the subject, no less than the tax-payers of the day, may congratulate themselves that certain of the earlier figures of British archaeology were not invested by the State with powers that might well have increased the extent of those devastations which we have good reason to mourn at the present time. In the second place the whole conception of the State exerting its power for the conservation of a national heritage at the expense of a narrowly conceived view of private property is of itself a product of recent constitutional changes, reflected in the successive extensions of the franchise between 1867 and 1918. The various Ancient Monuments Acts, etc. may be considered as manifestations of the same social conscience that successfully demanded such measures as the regulation of conditions of employment, insurance for work-people, provision for unemployed persons, compulsory education, suitable housing for the poor, and the nationalization of certain resources such as petroleum.

¹ We are dealing here with England only.

ARCHAEOLOGY AND THE STATE

We shall consider the question of the relations of the State to archaeology under four separate heads :—

1. The preservation of monuments.
2. The mapping of antiquities.
3. The preservation of loose antiquities.
4. Museums.

I. THE PRESERVATION OF MONUMENTS

It will be convenient first of all to pass in review the successive Acts of Parliament by which the State has recognized, and to a large extent assumed, its obligations in respect of the preservation of monuments of national importance.

The Ancient Monuments Protection Act, 1882, is chiefly important in that it constitutes the earliest recognition by the State of its responsibility for national monuments. Some 68 monuments in the British Isles were specified in a schedule as being of national importance, and among them were numbered such famous sites as Stonehenge, Avebury, Arbor Low, and New Grange. The Act provided that anyone, *the owner excepted*, convicted of damaging or defacing any of these monuments would be liable to a fine not exceeding £5 or one month's imprisonment. Secondly it provided that *owners should have power* to constitute as guardians (of any of the monuments on the schedule) the Commissioners of Works, who would thenceforth be responsible for their maintenance ; in this event the owner would become liable to the same penalties as any member of the general public for any damage he might do. Thirdly the Commissioners could *with the consent of the owner* and of the Treasury purchase any monument on the schedule, and fourthly they could accept as a gift or bequest any such monument. Finally it was provided that one or more inspectors be appointed by the Commissioners of the Treasury 'to report . . . on the condition of such monuments, and on the best mode of preserving the same'.

As previously intimated the Act is important more as an indication of dawning responsibility than for any real power that it bestowed on the State for the implementing of its intentions. The authority of an owner over his property, even where expressly stated by the Act to be of national importance, remained unimpaired unless of his free will he placed it under the guardianship of the Commissioners of Works, or sold, gave or bequeathed it to the same authority. It is no surprise, therefore, that the first Inspector appointed under the Act, General Pitt-Rivers, soon wearied of his task and felt compelled to offer his

ANTIQUITY

resignation after seven years' experience of Government inactivity.² In actual fact, the Act being almost entirely permissive in character, the Government enjoyed no authority to act even assuming it felt the desire or the responsibility.

More elasticity was secured by the Act of 1900, which empowered the Commissioners of Works to become guardians at the request of the owner of *any* monument (as opposed to scheduled monuments only) when its preservation was considered to be 'a matter of public interest by reason of the historic, traditional or artistic interest attaching thereto'. The only exceptions to the scope of the Act were dwelling-houses occupied by anyone other than a caretaker and family. This Act is interesting in that it empowered County Councils to purchase by agreement, to become guardians of, and to contribute towards the cost of maintenance of, monuments within their counties 'or in any adjacent county'. Another important principle that was to survive was that of public access to monuments within the ownership or guardianship of the Commissioners or of the County Councils; in the latter case the permission of the owner was necessary. For the purposes of the Act 'monument' was defined as 'any structure, erection, or monument of historic or architectural interest, or any remains thereof'.

The Act of 1910 empowered owners to give or will monuments within the meaning of the Act of 1900, thus remedying a careless omission from that Act.

The Acts of 1900 and 1910 did little to lessen the essential weakness of the original Act. A memorandum by the First Commissioner of Works, published in the Annual Report of the Inspector of Ancient Monuments for 1912, is worth quoting in this context; 'existing Acts', it stated, 'are purely permissive in character. The State cannot undertake the guardianship, or arrange for the protection, of any monument, except with the consent, and indeed by the desire, of the owner'. The First Commissioner went on to point out that many monuments were falling into decay, declaring in conclusion . . . 'it is, in my opinion, most desirable that the State should have power to intervene in such cases'. The result was the new Act of 1913, which repealed the previous Acts, consolidated their main provisions relative to purchase and guardianship, and added in the Preservation Order a potent weapon in the struggle to prevent the destruction and decay of monuments of national importance.

² *Vide* Third Annual Congress of Archaeological Societies, 23 July 1891.

ARCHAEOLOGY AND THE STATE

The Commissioners of Works were empowered to constitute an advisory board, known as the Ancient Monuments Board, and composed of representatives drawn from the Royal Commissions on Historic Monuments, the Society of Antiquaries of London, the Society of Antiquaries of Scotland, the Royal Academy of Arts, the Royal Institute of British Architects, the Trustees of the British Museum, and the Board of Education. It was on the advice of this Board that the Commissioners were enabled by the new Act to place under the protection of the State by means of a Preservation Order any monument of national importance declared to be in danger. In order to ascertain the state of any monument the Board were empowered to carry out an inspection. The Preservation Order would be effective for 18 months unless confirmed by Parliament, and if unconfirmed at the end of that time it could not be applied to the same monument for a period of five years. When in force the Preservation Order placed a monument under the protection of the State, carrying with it penalties of a fine of £5 or for any damage or alteration one month's imprisonment. Moreover if any monument, the subject of a Preservation Order, appeared likely to fall into decay, the Commissioners were empowered to make an order constituting themselves guardians of the monument for the duration of the Preservation Order *without the consent of the owner*. The Commissioners were further enabled to take measures for the protection of a monument, the subject of a Preservation Order, *with or without the permission of the owner*.

The 1913 Act provided a second important check on the destruction of monuments. The Commissioners of Works were instructed to publish a schedule from time to time of 'such monuments as are reported by the Ancient Monuments Board as being monuments the preservation of which is of national importance', and to inform owners when fresh monuments were added to the list. It then became the duty of owners to give one month's notice of their intention 'to demolish or remove in whole or in part, structurally alter, or make additions to, the monument', so allowing time for a Preservation Order to be issued. The penalties for failing to give such notice as the Act required were a fine of £100 or imprisonment for three months or both.

From the provisions of this Act, as of previous Acts, all inhabited dwelling-houses, other than those occupied by a caretaker and family, were excluded as well as buildings at present in ecclesiastical use. The definition of 'monument' was, however, somewhat widened to include 'any part of the adjoining land which may be required for the purpose

ANTIQUITY

of fencing, covering in, or otherwise preserving the monument from injury', and further 'the means of access thereto'.

A major defect of the 1913 Act was revealed in a dramatic manner when a Company was formed for quarrying the rock in the immediate neighbourhood of the Roman Wall. The Wall itself and its subsidiary constructions were protected under the Act and many people assumed that the protection would extend to such parts of their immediate surroundings as gave them their character and meaning. This assumption, however, proved groundless when tested by this practical case and the grandeur of the Wall was only saved to the Nation by the munificence of a private individual. The outcome of the scare was the Act of 1931.

The new Act introduced the principle of the 'controlled area' by which the Commissioners were empowered to delimit such an area contiguous to a monument as will ensure the full preservation of its amenities. Within the area controlled buildings can be prohibited or restricted and their design and appearance prescribed, excavations and tree felling can be prohibited and any other restrictions imposed that may be necessary. The owner can be compensated for any loss he may sustain through the restrictions, but for any contravention of the scheme he may be fined up to £20 a day. In various other ways the Act of 1913 was tightened up and in some cases its provisions were extended considerably in scope.

The Act of 1931 has been in force for too short a period for its full weight to be felt; it would, however, be safe to say that the legislative powers at present possessed by the Commissioners of Works for the preservation of ancient monuments of national importance are greater than is generally realized. Financial considerations are bound to curb development to a certain extent and it is certain that the Commissioners will not exert their powers too much in advance of public opinion. With these reservations, however, it remains a fact that by the exercise of powers already legally entrusted to them the Commissioners could control the whole of the archaeological excavation of the country: not only are the Commissioners themselves empowered to carry out excavations, but by including 'any cave or excavation' within the definition of 'monument' they are able to employ the Preservation Order and other weapons to stay undesirable excavations by others. Legally, indeed, it would seem that the Commissioners of Works could bring to an end all excavation by individuals or societies, and themselves exercise a complete monopoly. Present practice, as

ARCHAEOLOGY AND THE STATE

well as the traditions of the country, indicate that in fact the Commissioners will co-operate with individuals and bodies of proved competence; meanwhile it is satisfactory to know that powers exist which may curb the inefficient, uneconomic, and therefore anti-social, excavation that is still responsible for the steady destruction of ancient monuments. The only tragedy is that the necessity for these powers was not earlier appreciated. The extent and rapidity of the destruction of ancient monuments by agriculturalists and archaeologists during the last hundred years has been appalling. We illustrate (FIG. 1) the distribution of megalithic monuments in a district of Hannover, which happens to have been accurately surveyed in 1846 and again in 1914;



FIG. 1

(Reproduced by courtesy of Dr Jacob-Friesen, Hannover)

The left-hand map illustrates the distribution of megalithic tombs in the *kreis* of Ülzen in the province of Hannover, as surveyed by C. von Estorff in 1846, when 129 survived relatively intact and at least 90 survived in a damaged condition. That on the right shows the distribution of the same class of monument as observed by Dr Jacob-Friesen in 1914, when no more than 14 examples survived.

the destruction revealed by a comparison of these surveys is probably not abnormal.³ The powers possessed by the Commissioners may appear dangerous on paper, but in the face of such menaces they are certainly not too great; we feel confident that in practice the English tradition of co-operation between State and individual will assert itself and nullify the possibility of any centralized bureaucratic control.

THE INSPECTORATE OF ANCIENT MONUMENTS

In describing the gradual development of the legal control by the Commissioners of Works over ancient monuments of national

³ e.g. Dr Fox's remarks on the destruction of round barrows in *The Archaeology of the Cambridge Region*, pp. 28-9.

ANTIQUITY

importance we have necessarily referred constantly to the machinery by which the Acts are enforced. The original Act of 1882 provided for the appointment by the Treasury Commissioners of 'one or more inspectors of ancient monuments, whose duty it shall be to report to the Commissioners of Works on the condition of such monuments, and on the best mode of preserving the same'. General Pitt-Rivers was appointed in 1882 and held the position until his death in 1900, though disgust at the futility of the Act prevented him from drawing his salary or taking any very active interest after 1890. After the death of the General, indeed, the office fell into abeyance. A good deal of work was done unofficially by Mr J. Fitzgerald, who had overtaken the arrears of work by 1908, only to die in the following year. In 1910 Mr (now Sir) C. R. Peers was appointed and it was under his leadership, as Inspector to 1913 and Chief Inspector from then till 1933, that the Inspectorate as it exists today was built up. It not only controls in practice the machinery for the preservation of ancient monuments, but in the person of its late Chief Inspector, it did much to mould the course of the necessary legislation. Moreover the same annual report (1912) of the Inspector which exposed the inadequacy of the then existing Acts also laid down the fundamental principles which have in practice guided the Commissioners of Works in the actual work of preservation. The Commissioners were to avoid 'as far as possible . . . anything that can be considered in the nature of restoration' and were 'to confine themselves rigorously to such works as may be necessary to ensure their stability, to accentuate their interest, and to perpetuate their existence in the form in which they have come down to us'. Up till the end of 1933 the total number of monuments in England scheduled for protection had reached 2205.

THE ROYAL COMMISSION (ENGLAND)

As a necessary preliminary to the extensive preservation of monuments of national importance by the State an authoritative survey of all existing monuments of a certain antiquity was and is a paramount necessity. A Royal Commission was therefore appointed in 1908 'to make an inventory of the Ancient and Historical Monuments and Constructions connected with or illustrative of the contemporary culture, civilisation and conditions of life of the people in England, excluding Monmouthshire, from the earliest times to the year 1700, and to specify those which seem most worthy of preservation'. The first Secretary to the Commission was the late Sir G. E. Duckworth

ARCHAEOLOGY AND THE STATE

(1908-33), during whose term no less than fifteen volumes were published notwithstanding the interruption caused by the Great War. The volumes have set and maintained a standard of accurate scholarship which is widely recognized, yet they are so written and illustrated as to appeal to the general educated public. They thus serve not only to provide the accurate information required for a comprehensive policy of preservation by the State, but also to broaden interest in the antiquities of the country and to stimulate that public opinion which is so necessary to the satisfactory operation of the Acts. Considering the attention to detail and the wealth of the material dealt with the output of the Commission has been astonishing. During the first period of activity between 1908 and 1915 the English Commission investigated no less than 5631 monuments in 462 parishes, while on resuming its activities from 1919 until 1923 it dealt with 3554 monuments in 314 parishes. In this way the investigation of the monuments of the counties of Hertfordshire, Buckinghamshire and Essex was completed. The Commission next turned its attention to the difficult area of London, on which it published five volumes between 1924-30 in addition to a sixth volume for Huntingdonshire. From 1930-2 2480 monuments in 169 parishes were investigated in Herefordshire, the third and final volume on which has been published recently. Whilst engaged on counties the Commission has investigated well over 700 monuments annually, a truly amazing record of achievement when one considers that many of the monuments concerned are of considerable size and complexity. The cost to the tax-payer is, owing to the speed with which the work is done, almost negligible. Working on the basis of the average number of monuments investigated and the total estimate of annual expenditure it costs about £8 to have each of our English monuments investigated, truly a small enough sum to secure such a birthright.

2. THE MAPPING OF ANTIQUITIES : THE ORDNANCE SURVEY

It is a truism of modern archaeology that one of the most significant facts about antiquities is their exact provenance, and the State in the guise of the Ordnance Survey has contributed handsomely to British archaeology in this respect. Although at present a department under the Ministry of Agriculture and Fisheries, the Ordnance Survey was military in origin and is still mainly staffed by Royal Engineers. Owing, however, to the antiquarian interests of General Roy (1726-90), author of *The Military Antiquities of the Romans in North Britain* and virtual

ANTIQUITY

founder of the Survey, archaeological information has from the beginning been incorporated on its published sheets. We illustrate (FIG. 2) part of a sheet of the original 1-inch survey on which archaeological features were marked. Roy's tradition was ably maintained by subsequent Directors, notably by Sir Charles Close, and ultimately resulted in 1921 in the appointment of an Archaeology Officer to the staff. The primary task of this Officer is to ensure the accuracy of the archaeological features printed on the maps issued to the public, to revise the information for new editions and, so far as is practicable, to incorporate fresh discoveries as they are made. In this way the State is able to ensure the adequate cartographic record of its antiquities at a negligible cost, and the general public is given accurate information on its maps. There is no doubt that the practice of marking the sites of antiquities on the ordinary official maps has done much to broaden general interest in the subject, and for this reason alone the institution of an Archaeology Officer has been invaluable; but already there is a growing public with a special interest in archaeology and to serve this the Ordnance Survey is producing Period Maps, which are models of their kind. Those already published include Roman Britain, 17th century England, two sheets of a Megalithic Survey, and the first sheet of a survey of the Celtic Earthworks of Salisbury Plain. The staff can hardly be regarded as commensurate to the magnitude of its task, but it is important that the accurate mapping of national antiquities has been recognized in principle as a legitimate charge upon public resources.

It will be convenient to note under this heading the contribution made to British archaeology by the Royal Air Force, since in practice the air-photographs of archaeological interest taken during the course of training are dealt with at the Ordnance Survey. The air-photographs are filed at Southampton and prints may be bought by the general public (crown copyright being reserved). It is interesting to notice that the survey of Celtic Earthworks on Salisbury Plain has largely been based upon air-photographs taken by the R.A.F. in the normal course of duty.

3. PRESERVATION OF LOOSE ANTIQUITIES

When we come to examine the powers exercised by the State over moveable antiquities we find ourselves confined to a consideration of the law of treasure trove, since apart from its jurisdiction within this extremely narrow sphere the State appears to have no powers over antiquities found in its own soil, unless within the area of a National Monument within its ownership.

ARCHAEOLOGY AND THE STATE

Fortunately one more qualified in every way to discuss the subject has recently published an important paper on 'The law and practice of Treasure Trove' (*Antiquaries Journal*, 1930, pp. 228-41), so that it will be unnecessary to enter into any detail. As is the usual case with the laws and institutions of our island the origins of the law of treasure trove are lost in the mists of antiquity, mists into which we have no desire to stumble. Sir George Hill has given us the key to the proper understanding of the law when he bids us consider it as no more than 'a specific application of the common law of the land, which provides that the estate of a person dying intestate with no known heirs becomes the property of the Crown'. We feel incompetent to define the law in a manner likely to commend itself to a lawyer, and confident that if we succeeded we should fail in the more important task of conveying information to the general public. We shall rest content, therefore, with stating the fundamental facts which determine whether or not a given find falls within the category of treasure trove. In brief the law applies only to treasure that has been hidden and of which neither the owner nor his representative can be found, the treasure itself being either of gold or of silver. It does *not* apply to treasure that has been abandoned,⁴ *nor* does it apply if the owner can be found, *nor* does it apply to any objects other than those of gold or silver.

In origin there is no doubt that treasure trove was solely designed to secure revenue to the Crown and to this day the concealment of treasure trove remains a misdemeanour. It is, therefore, the police who are responsible for seeing that treasure trove is properly reported, and it is by a Coroner's inquest that it is decided whether or not a given find is in fact treasure trove. The attitude of the Treasury, however, to whom the treasure is ultimately delivered, has undergone a welcome change, and the law of treasure trove as today administered forms part of the machinery by which the national antiquities are preserved by the State. This change of attitude can be summarised quite briefly by considering the position of the finder of treasure trove. Up till 1871 his chances of receiving any reward at all were doubtful and until 1886 he was paid only the bullion value of his find. The Treasury Minute of 13 July 1886, however, marks a new step forward, and taken in

⁴ In the words of Judge Baylis, writing in the *Archaeological Journal* (1886, XLIII, 342) and quoted by Sir G. Hill, the treasure 'must be found hidden *in* the earth or in the walls, beams, chimneys, or other secret places above the earth, but affixed to the soil'. 'If found *on* the earth or in the sea' it is not hidden, but abandoned and therefore outside the scope of the law.

ANTIQUITY

conjunction with the Ancient Monuments Act of 1882 can be taken as a definite indication that the State was no longer indifferent to the fate of its antiquities. The minute stated: 'My Lords have stated that the Crown right to treasure trove, regarded financially, is valueless, and that special cases excepted, they would not assert the Crown's claim at all. They, in fact, only interest themselves in the matter to assist the efforts of Antiquarian Societies for the preservation of objects of general interest'. In order to further this desirable object finders of treasure trove who properly reported their finds were from this date rewarded on the basis of the antiquarian value of their discoveries, subject only to a deduction of from 10 per cent. to 20 per cent. Finally within very recent years the Treasury has waived its right even to this small deduction.

In practice, once the Crown's right to the treasure has been established by a Coroner's inquest, its administration is delegated by the Treasury to the British Museum. At the British Museum the treasure is examined and valued by experts on the basis of its market value. Any objects not retained by the British Museum, the Royal Mint, local museums or the owner of the land on which they were found, are returned to the finder, who receives in addition the full value of any objects retained. In this way every encouragement is given to anyone who finds treasure trove to report to the police without delay, in order to qualify for a reward fixed by impartial and expert opinion. Meanwhile the penalties for intentional concealment still remain, and the alternative to receiving a financial reward is a fine and imprisonment with hard labour.

Admirable in its limited scope though the law of treasure trove may be in these latter days, when it works for ends entirely foreign to those which inspired the evolution of its mechanism, it can hardly be regarded as an efficient method for the safe-guarding of moveable national antiquities as a whole. The insufficiency of a law which takes into account only objects of gold and silver (and even those only when found under certain circumstances) is well illustrated by the maxim of General Pitt-Rivers, the father of modern British field-archaeology, that 'the value of relics, viewed as evidence, may . . . be said to be in inverse ratio to their intrinsic value'.⁵

At the present time antiquities other than those coming within the scope of treasure trove belong to the ultimate owner of the land upon

⁵ Preface to volume III of *Excavations in Cranborne Chase*, p. ix.

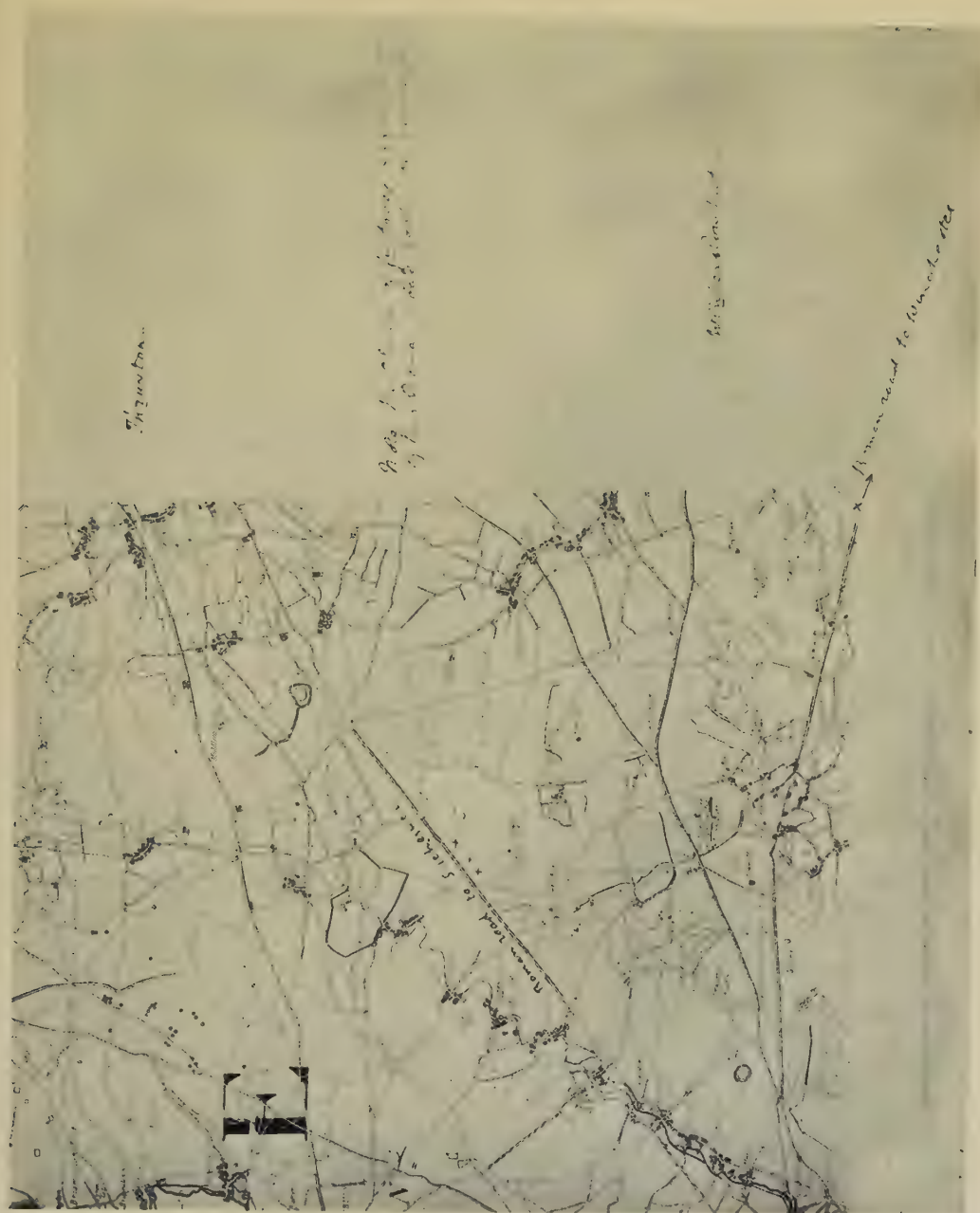


FIG. 2. PROOF OF THE FIRST EDITION OF A SHEET OF THE 1-INCH ORDNANCE SURVEY MAP published 14 August 1817, with corrections in the handwriting of Sir Richard Colt Hoare. It shows the district to the northeast of Salisbury with the valley of the river Bourne. Figsbury can be seen in the left-hand bottom corner. Numerous tumuli are also indicated

ARCHAEOLOGY AND THE STATE

which they are found. It is a curious anomaly that while monuments and constructions of national importance have been to a very large extent socialized by the Acts and the machinery which implements them, loose antiquities, including in some cases the very objects which give indication of the date or associations of a monument of national importance, are left unprotected to be bought and sold, collected or lost, or intrigued for by museums. The anomaly is brought home the more when we consider that the archaeological objects in monuments placed under the protection of (but not the property of) the Commissioners of Works belong to the land-owner and not to the State, even though they alone might lend any meaning to the monument in question. The attitude adopted by the modern State that ancient monuments are in effect the heritage of the nation and not the playthings of individual land-owners seems to demand some measure of protection for loose antiquities found in the soil. The enlightened manner in which the law of treasure trove is now administered is so much to the good, but it is totally insufficient to ensure the proper preservation of what ought to be regarded as part of the national heritage.

Before leaving the subject of loose antiquities it might be useful to mention the Geological Survey, since for the earlier periods of archaeology monuments and constructions tend to give way to geological sections. Much has been done in the past by individuals on the staff of the Survey, such as Skertchley and Jukes-Browne, and much is now being done to notice features of archaeological interest in the course of geological work. We suggest, however, that an archaeological staff officer similar in status to the one attached to the Ordnance Survey might save a vast amount of information about the earlier periods of British Archaeology that is now lost.

4. MUSEUMS

An essential part in the preservation of antiquities is played by museums, and it is therefore necessary to consider how far those in this country are organised and how far they are in themselves equipped for the services they ought to render to the community. In actual fact there is very little to consider, since there is an almost total lack of organization and system for the museums as a whole, and with very few exceptions the individual institutions lack the first elements of a proper equipment.

In his most admirable Report on the Public Museums of the British Isles prepared in 1928 for the Carnegie United Kingdom

ANTIQUITY

Trustees, Sir Henry Miers stated that 'one of the peculiarities of the present museum system in England, Northern Ireland and Scotland is the almost entire absence of any form of co-operation'. This is perhaps partly due to the fact that the museums have grown up or rather struggled into existence singly and unrelated to any plan. Some museums are private, others belong to Societies of various kinds, others are attached to Universities and Schools, a great number are run by municipalities, and a few are of national character. Over the first three categories there is no kind of public control. The municipal museums maintained by the rates came into being as a result of the Museums Act of 1845 and subsequent Acts, all of which were mainly concerned with empowering local authorities to appropriate public money to the upkeep of museums. Legislation on the subject of museums has been concerned almost solely with the purely financial aspect of the situation, and the management of each institution is left in the hands of a committee of the local council. The only national museum with which we are concerned here is the British Museum, which is still run along the lines laid down by the British Museum Act of 1753, vesting the museum and collections in a Board of Trustees, and laying down the principle of free access for the public. Strictly speaking the British Museum is the only museum in England containing substantial collections of British antiquities for which the State is responsible. There are no formal relations between the British Museum and other museums in the country of any kind whatsoever, except in so far as the British Museum is authorized under certain conditions to distribute duplicate specimens. An organized system of museums in this country simply does not exist. Their distribution is 'of the most haphazard nature', they have no defined spheres of influence, and they are linked by no connexion either with one another or with any central institution.⁶

No intelligent person reading Sir Henry Miers' report could fail to be shocked by the glaring inadequacy of the equipment of the museums dealt with. As regards staff Sir Henry Miers found that in only 14 per cent. of the museums of the British Isles was there a full-time paid curator, while in only 4 per cent. was there an assistant curator. He further found that in many instances the curators appointed lacked 'any previous training or experience', while one of

⁶ This reflects in no sense on the work of the Museums Association of which Sir Henry Miers stressed the importance and value.

ARCHAEOLOGY AND THE STATE

the chief facts disclosed by his enquiry revealed a 'disgracefully low standard of salaries', salaries falling on the average 50 per cent. below the minimum recommended by the Museums Association. As to buildings he found that 'only 10 per cent. of the museums in the country are housed in a separate building (good or bad) designed for the purpose', while 'very few of the museums in the country are provided with the storage rooms or work-rooms which are essential'. Small wonder is there 'that almost all museums contain collections . . . consisting to a great extent of mere curios'!

With the educational aspect of museums, important though it is, we are not here concerned, but rather with the bare preservation of antiquities, which should be a national interest. If the State is to extend its interest from monuments and constructions to the objects which so often date them and invest them with meaning and associations, it seems clear that it will also have to take in hand the whole problem of the proper organization of museums. It would appear that there are certain drastic changes necessary, and we suggest that there are certain elementary pre-requisites for efficiency:

- (a) Museums should be set up where they are required.
- (b) They should no longer exist as isolated and in some cases competing units. They should in some way be related to the National Museum, and they should each serve a recognized territory.
- (c) They should be staffed by trained curators, who should be paid salaries bearing some relation to their attainments and social value.
- (d) The buildings in which collections are housed should be designed as museums, and should be equipped to meet the needs of the various classes of person using a museum.

These requirements are simple enough and their cost quite trivial when compared with the millions spent on other 'services', social and otherwise. Moreover a State policy for museums seems to be the logical conclusion of the policy for the preservation of national antiquities, to which the State is already partly committed. With the museums in their present state any effective control of antiquities, other than monuments or constructions, would appear to be difficult if not impossible. Conversely it must also be clear that so long as the private ownership of antiquities from English soil is tolerated by the State it must remain difficult for the museums to help themselves. The necessity of negotiating for objects with private individuals imposes

ANTIQUITY

an intolerable burden upon museum staffs, and frequently means the acceptance of junk, hampering restrictions on the proper utilization of objects, and even the temporary suppression of provenance.

In conclusion it would be true to say that while the State has been eminently successful in the limited spheres of archaeology into which it has entered, much is lacking before a comprehensive policy for the preservation of the national heritage of antiquities can be said to exist. While the preservation of monuments and the mapping of antiquities are both on a sound basis, there is no organization for the preservation of loose antiquities other than treasure trove, and no organization of museums in which to house and exhibit them.

ARCHAEOLOGICAL PUBLICATIONS OF THE ORDNANCE SURVEY

Map of Roman Britain, 1928.

Map of xvii Century England, 1930.

Megalithic Survey :—

Professional Paper, 6. The Long Barrows and Stone Circles of the Cotswolds and the Welsh Marches. (Sheet 8, $\frac{1}{4}$ inch map), 1922.

Professional Paper, 8. The Long Barrows and Megalithic Monuments of Kent, Surrey and Sussex. (Sheet 12, $\frac{1}{4}$ inch map), 1924.

Map of Neolithic Wessex. (Sheet 11, $\frac{1}{4}$ inch map), 1933.

Map of the Trent Basin. (Sheet 6A, $\frac{1}{4}$ inch map), 1933.

Professional Papers :—

No. 7. Air Survey and Archaeology, 1924.

No. 10. The Work of the Ordnance Survey : Archaeology and the Ordnance Survey, by O. G. S. Crawford, 1926.

No. 12. Air Photography for Archaeologists, 1929.

Celtic Earthworks of Salisbury Plain : Old Sarum, 1934.

N.B. The Megalithic Survey will be completed in eleven sheets, and the survey of Celtic Earthworks of Salisbury Plain in six. It should be noted that the first two sheets of the Megalithic Survey (numbers 8 and 12 in the Old Series) were published as Professional Papers (numbers 6 and 8 above), so that four sheets have been dealt with. Three more sheets are rapidly nearing completion and publication. East Anglia contains no megalithic monuments so that no map of this area will be published. The precise position of the Survey cannot be stated concisely, owing to the fact that, since it was begun in 1924, the sheet-lines of the $\frac{1}{4}$ inch map, which was then adopted for convenience as the publication unit, have twice been altered. But it may be said that only two whole sheets (7 and 10 in the present series) and one half-sheet (the eastern, or mainland, portion of Sheet 2) have not yet been touched. When the Megalithic Survey is complete, the combined results will be published on a single Period Map on the scale of 1 : 1,000,000 uniform in style with the maps of Roman Britain, xvii Century England and the forthcoming Map of Britain in the Dark Ages.

Defences against Cattle-Raiding

by G. W. B. HUNTINGFORD

'Beech Bottom dyke would break the heart
of any cattle-raider',—DR R. E. M. WHEELER.

WHEN I suggested, in commenting on this quotation,¹ that an African cattle-thief would laugh at Beech Bottom dyke, Mr Crawford did not agree; and the idea that seems to prevail with regard to the stopping-power of a ditch and bank is responsible for these notes.

Cattle-defences may be considered under two heads: 1, Fences: 2, Dykes: the latter being actually of secondary importance when the object in view is to keep cattle in or out; and stockades without a ditch do occur in Britain.²

Fences which do not involve the use of iron are of four kinds:

(1) The post and rail stockade (PLATE I), where the uprights are sunk at least 2 ft. into the ground, and often deeper.

(2) The dead hedge (PLATE II), '*Saeps agrestis e ligno, sed non vivit*' of Varro,³ consisting of branches and poles set upright in shallow holes, with brushwood interlacing.

(3) The trunk fence, consisting of trunks laid lengthwise and close together, with a filling of loose branches and brushwood, and recalling the blocked fort-entrance described by Caesar.⁴

(4) The stone wall.

Excluding the stone wall, which is only found in certain parts of Britain, it may be said that the first three types of fence are in themselves more or less effective cattle-defences. A sufficiently stout post and rail fence provides almost complete security; the dead hedge, which is the ordinary fence used by the pastoral tribes of East Africa, is secure up to a point, though when cattle are scared by a sudden alarm they can usually break through it somewhere. The trunk fence, if the amount

¹ ANTIQUITY, 1933, VII, 25.

² *ib.* 484.

³ *Res Rusticae*, I, 14. §2. Goetz.

⁴ B.G., v, 9, 4.

ANTIQUITY

and size of the trunks is large enough, is usually fairly effectual, though it is more laborious to erect. None of these fences requires a ditch to keep cattle inside.

As to dykes in connexion with cattle, it may be noted that unless their sides are almost perpendicular—in fact much steeper than any earthwork in Britain—they are no barrier to cattle; for cattle can climb without trouble slopes which a man finds very difficult. They are sure of foot in rough or stony places, and have remarkable powers of keeping on their feet on wet, slippery ground. In hilly country in East Africa, moreover, they graze on very steep hillsides, and even on railway embankments with a slope of $1\frac{1}{2}$ in 1. In order to test the matter,

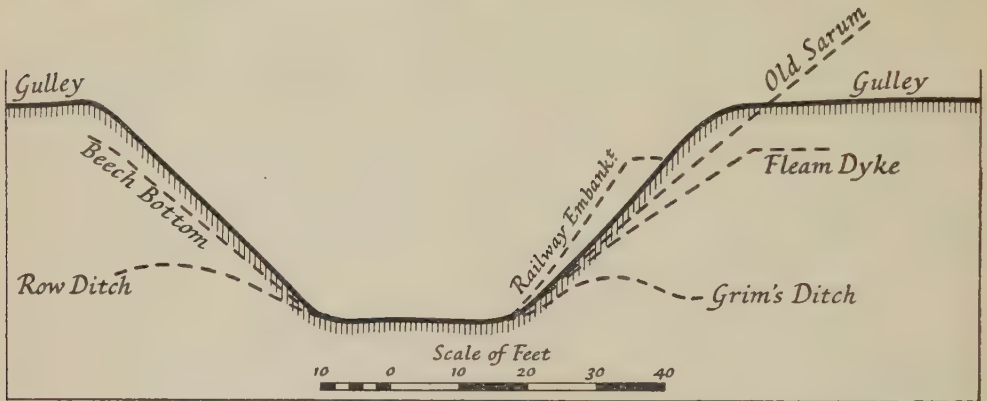


FIG. 1. SECTION OF NATURAL GULLEY, COMPARED WITH OTHER EARTHWORKS

however, and settle definitely whether cattle could or could not climb slopes similar to those found in British dykes, I had a herd driven across a natural gulley 30 ft. deep, with a level floor at the bottom 30 ft. wide—which gave ample room to scatter sideways (PLATE III). The herd was attended by two men and a small boy, and they had no difficulty in driving it up the opposite slope. The section of this gulley is given in FIG. 1, compared with five British dykes and a railway embankment :

- (1) Old Sarum, outer ditch on north side.
- (2) Fleam Dyke, near Bedford Gap. (Fox).
- (3) Grim's Ditch, near Spring Pond, Cranborne Chace (Sumner).
- (4) Row Ditch, Wilts. (Clay).
- (5) Beech Bottom. (V.C.H. Herts, I, 124).

DEFENCES AGAINST CATTLE-RAIDING

The natural gulley has a rough, crumbling surface, giving a bad foothold : the cattle crossed it without hesitation. A bare earthwork, especially if the soil is clay, is not so easy to climb when wet, though not impossible ; and it must be remembered that grass grows very quickly, and in a year or so a good covering of grass gives a fair foothold on any type of soil. A steep bank, therefore, unless continually kept free from grass, loses its only asset as a cattle-barrier—an asset which is never really formidable.

Cattle-raiding is a fine art, and is not undertaken haphazard. Among the Nandi of Kenya, young men combine in groups for the purpose, and for each raid one man is chosen as the leader. He selects his companions, who are never less than two, and usually three, so that a party of four may set out. Before raiding, they collect all the necessary information as to the position of the cattle-fold, houses, etc., and when actually at work, one man keeps watch, one man opens the fold and drives out the cattle, and the others head them off in the direction of retreat. If undetected, the cattle are driven to their destination in a roundabout way, taking what would seem to be an unnecessarily long course. This is to put pursuers off, and to cover their trail ; and unless caught close to the site of the theft, they are seldom taken while travelling, though cattle may be recovered after they have reached their destination. FIG. 2 shows two cattle-routes across the Uasin Gishu plateau, Kenya ; in both routes several rivers have to be forded, the largest (the Nzoia) being particularly nasty to cross. As will be seen, distance is no objection to people who have specialized in this occupation for centuries ; and though the Nandi are remarkably bad stock-farmers, they have undoubtedly a genius for driving cattle long distances in the shortest possible time. Anything in the nature of a dyke or gulley to be crossed presents no difficulty, for two of the party stationed in the bottom can easily prevent lateral scattering of the animals ; and if a swamp be encountered, a *détour* is made to get round it.

In East Africa, there is a definite raiding season, beginning about October, when the long rains are over. At this time of year the ground is dry, and gives a good foothold for cattle and men even on the most precipitous and rocky slopes ; ideal night conditions are obtained after full moon, when the moon rises about or after midnight, and there is enough light before moonrise to see without being conspicuous. And here I would point out that African ground conditions cannot be compared with those of Britain ; the African are much worse. For we have higher and steeper hills ; more and larger rocks ; a soil intolerably

ANTIQUITY

slippery when wet ; hundreds of acres of dense grass, often shoulder high even on steep hills ; and precipitous river-valleys up to 600 ft. deep, often with a slope of 1 in 1 ; many of the rivers, too, as well as small streams are quite unapproachable in most places unless you hack your way through solid undergrowth. Such conditions are unknown in Britain—even on the chalk.

The prevention of theft from a fenced cattle-enclosure is easier, of course, when the herdsmen sleep inside with their cattle. Some East African pastoral tribes (*e.g.* the Nandi) have a dead-hedge enclosure for cattle close to but separate from the dwelling huts ; others, like the Uasin Gishu Masai, build their huts inside the enclosure, as in FIG. 3, which shows a dead-hedge surrounding four huts with flat thatched roofs plastered with dung.⁵ The only exact British parallel to this that I know of is the Romano-British cattle-enclosure on Lowbury Hill, Berks, where a farm-yard enclosed by a flint wall about 4 ft. 6 ins. thick, with (apparently) pent-house roofs for the men, dates from perhaps A.D. 200.⁶ (FIG. 4). A stone wall is the ideal cattle-defence, as it cannot be broken down in a hurry ; but for modern savages it is too laborious, especially when they are continually on the move for grazing and water ; and in the stoneless districts of Britain it is naturally rare. Cattle must have been kept in many of the British earthworks, though there is little direct evidence ; there is, however, one stone-walled fort in Wales which has a cattle-tradition, and provides another parallel. Caer Drewyn in Merionethshire⁷ has an area of 10 acres, and has a subsidiary external enclosure of one acre on the NE side containing the sites of hut-circles ; and a tradition, going back at least to the 16th century, says that it was made by Drewyn the Giant as a cattle-fold for his sweetheart ; and a century later Edward Lhuyd described it as ‘ a round stone wall about an acre of ground where they kept their cattel in war-time ’.⁸

When a cattle-enclosure is made of wood, still further protection is given by a pile of thorns and brushwood on the outside. This not

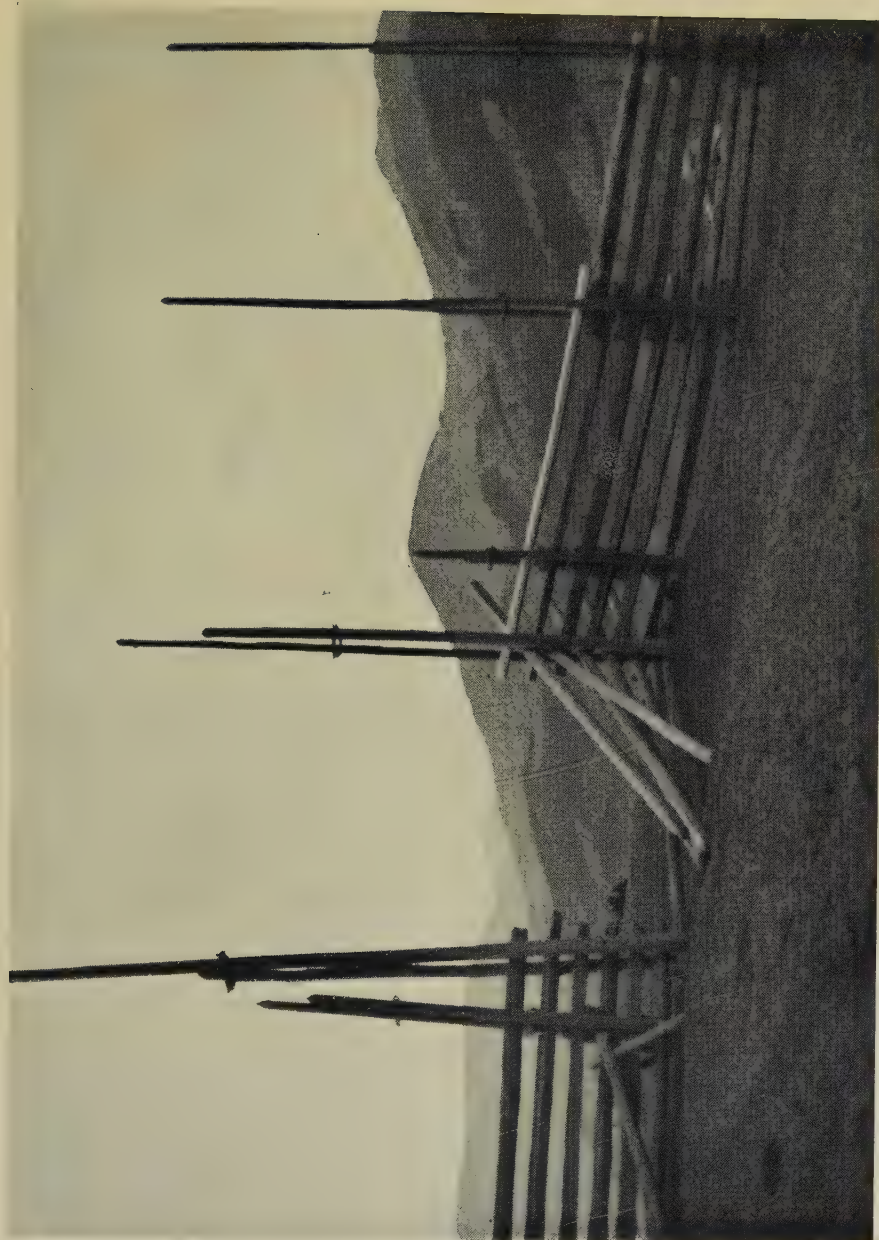
⁵ Pliny, describing the growth of the fig-tree (apparently in India) describes a live hedge used as a cattle-fold : ‘ intra saepem eam [ficum] aestivant pastores, opacam pariter et munitam vallo arboris (= with a ‘ vallum ’ of tree), decora specie subter intuitu proculve fornicato (=arched) ambitu ’. (N.H. XII, 11.)

⁶ D. Atkinson, *The Romano-British Site on Lowbury Hill*, 1916, pp. 4-7, 12, 28.

⁷ 6 in. o.s. Merioneth, 8 sw.

⁸ Sion Dafydd Rhys, *c.* 1600, Peniarth MSS. 118, fo. 829 ; Lhuyd, *c.* 1698, *Parochialia*, II, 44 ; Ancient Monuments Commission, Inv. of Merioneth, no. 27.

PLATE I



POST AND RAIL STOCKADE, HUCULSZCZYNA, EASTERN CARPATHIANS, POLAND
Ph. Photo-Plat, Warsaw

PLATE II



'DEAD HEDGE' IN THE CARPATHIANS, ROUMANIA
Ph. O. G. S. Crawford

PLATE III



CATTLE BEING DRIVEN ACROSS A STEEP-SIDED NATURAL GULLEY, KENYA

Ph. G. W. B. Huntingford



FIG. 2

ANTIQUITY

only hinders thieves, but keeps out wild beasts, for no animal, be it wolf or wild dog, likes a mass of thorns ; and if the pile be large enough, even a lion will normally refrain from jumping over. The worst animal enemy of the ancient stock-farmer in Britain was

that grey beast
the wolf of the weald,⁹

a dangerous pest corresponding to the wild dog (*Lycaeon pictus*) in Africa, and resembling it in fearlessness and lust for killing. In districts infested by such animals a pile of thorns is essential.¹⁰

This brings us to the crux of the whole question : is a plain ditch and bank a barrier to cattle ? And in view of the foregoing remarks, the answer can only be, no. We are then compelled to accept ' no fence, no defence ' as an axiom in spite of the evidence, which shows that stockades have been found only in the following places :

1. Uffington Castle, Berks : along the top of the rampart. (Rev. J. Wilson in *Trans. Newbury F.C.*, 1872, vol. 1).

2. Caburn, Sussex : on the slope of the rampart, and perhaps not a stockade. (Pitt-Rivers in *Archaeologia*, XLVI, pp. 452 ff.)

3. Northfield Farm, Long Wittenham, Berks : a short length of stockade is marked on the plan of the excavations on this site. (Haverfield in *Proc. Soc. Ant.*, ser. 2, XVIII, 14).

4. Bran Ditch, Cambs. : a line of stakes between two parallel ditches. (*Earthworks Committee Report*, 1927, p. 24).

5. Durrington, Wilts : an ' egg-shaped earthwork in the field adjoining Woodhenge ', with stockaded entrance. (E.C.R., 1928, p. 19).

6. Wilbury, Herts. : a La Tène I fort was preceded by a ditchless stockade. (ANTIQUITY, 1933, VII, 484).

7. Salisbury Plain : a short length of palisaded linear earthwork. (O.S. map ' Celtic Earthworks of Salisbury Plain ', 1933, Old Sarum sheet, foreword p. 2, but not marked on the map ; fully described by Dr Stone, the discoverer, in *Wilts. Arch. Mag.* XLVI [June 1934], 450-3.¹¹

If an earthwork was intended to keep cattle in (and to protect them from wolves and men) it must have had some sort of fence ; and we

⁹ AS. Chronicle, sub. an. 938.

¹⁰ The wolf existed in a wild state in Britain in the 12th century (Giraldus Cambrensis, *Itinerarium Kambriae*, II, 10) ; and in Scotland as late as the 16th century (*Shakespeare's England*, I, 480).

¹¹ The question of wooden stockades in Britain is dealt with by Myres, Hawkes, and Stevens, in ' St. Catherine's Hill, Winchester ' (*Proc. Hants F.C.*, 1930, XI, 67-71), to which I owe the reference for Caburn.

DEFENCES AGAINST CATTLE-RAIDING

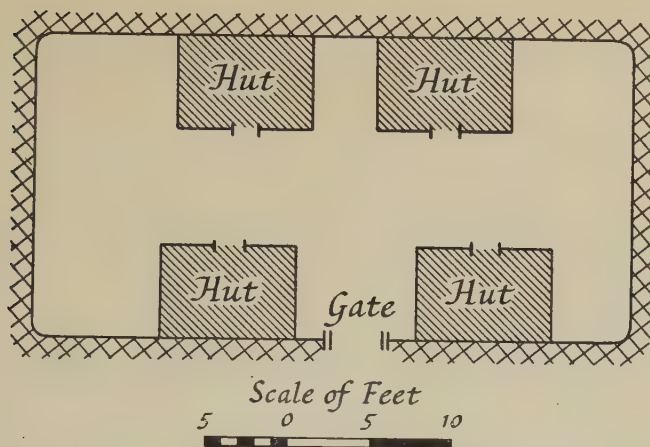


FIG. 3. PLAN OF ENCLOSURE FOR 20 HEAD OF CATTLE

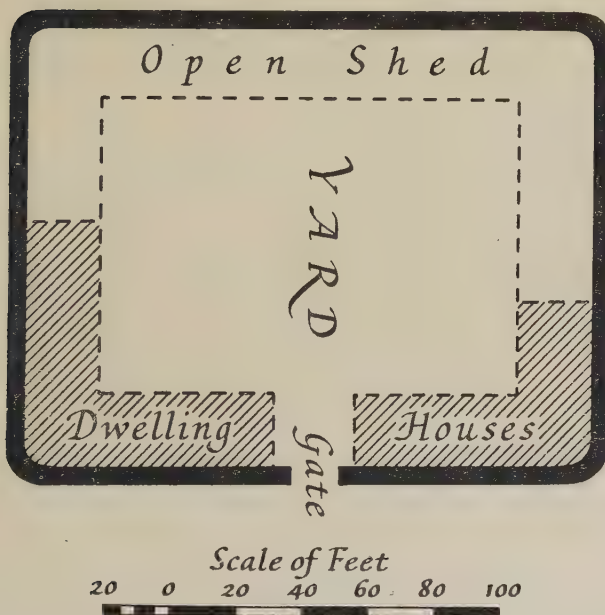


FIG. 4. PLAN OF CATTLE-ENCLOSURE, LOWBURY HILL, BERKS
WITH CONJECTURAL RESTORATION OF BUILDINGS

ANTIQUITY

must therefore assume that the fence was of the dead-hedge type, the holes for which, since they need not be deep, would leave no trace after the lapse of centuries. Such a fence would do well enough for a place where the herdsmen probably slept along with their cattle ; but for a long stretch of linear earthwork, it would be no bar to cattle-raiders, for they could easily tear it down, unless the earthwork was patrolled—and even then they would have opportunities at night. We must conclude that the stopping of cattle-raiders was no part, either intentional or incidental, of the functions of a linear earthwork, whatever those functions may have been.¹²

NOTE. I am not in the least convinced by Mr Huntingford's arguments. His natural gulley (PLATE III) with its ' rough, crumbling surface ' offers a far easier ascent and descent than the slopes of such a ditch as Beech Bottom or that revealed last summer at Maiden Castle, Dorset. I still maintain that it would be quite impossible for man or beast to climb the sides of big ditches dug in chalk or clay. Grass does not grow on steep chalk slopes, as any railway cutting shows : and even if the middle and lower slopes became covered with loose débris, there would still remain the bare uppermost section which, as any one who has climbed cliffs in his boyhood knows, often presents a final and insuperable obstacle to success.

PLATES I and II have been inserted by the Editor from his own collection, to illustrate Mr Huntingford's first two types of fence.

O.G.S.C.

¹² Cf. ' Wansdyke ', by Sir Charles Oman, in *Quarterly Review*, 1929, no. 502, pp. 290-300.

Some Thoughts on the Topography of Saxon London

by J. N. L. MYRES

IN the September number of *ANTIQUITY* (VIII, 290-302) Dr Wheeler analysed with characteristic brilliance the topographical and archaeological evidence for the relation of Roman and Saxon in Dark-Age London. He pointed out that the 330 acres enclosed by the Roman Walls were divided almost centrally by the Walbrook into two areas of rising ground, the eastern which we may term Cornhill, and the western Ludgate Hill. He showed that there is undeniable evidence epitomized in the position of the central basilica and of London Bridge to prove that the eastern of these was the nucleus of the Roman City, and that the inclusion of the western within the walls was intended 'to provide generously for a development which only in part materialized'. He noted further that the evidence for the earliest Saxon settlement within the walls pointed with hardly less emphasis to their preference for the western area, where the foundation of St. Paul's, the less certain suggestion of early church dedications, the traditional site of the Royal Palace, the certain position of the Folk Moot, and the more frequent occurrence of small objects of the early Saxon period combine to indicate the focus of their settlement. So far we may tread securely in his footsteps; we may agree with his summary of the contrast—'Roman London began on the Hill above London Bridge and spread westwards; Saxon London emerged on the western hilltop and spread eastwards'.

But he began his paper with an assumption, which the topographical and archaeological argument we have summarized, was intended to strengthen into a historical fact. 'I propose to assume' he wrote, 'that in some sort—if only as a sub-Roman slum—London lasted on through the Dark Ages; an urban anachronism, perhaps . . . but none the less an entity sufficiently living to transmit something of the Roman heritage to later times'. And he ends by claiming that during the 6th and 7th centuries 'the natural division of the city became, for a time, a cultural division [between sub-Roman and Saxon] also'. It is the purpose of this note to ask whether the facts adduced

ANTIQUITY

in the course of the paper make this any less an assumption at the end than it was at the beginning.

Why was the nucleus of Saxon London on the western rather than on the eastern hill? Dr Wheeler would presumably answer: 'Because the eastern was still occupied by the shrunken but still living entity on the Roman City'. He toys even with the idea of a continuous Christian cult in St. Peter's-on-Cornhill, standing as it does on the site of the Roman basilica and perhaps perpetuating 'a continuous tradition from the time when Christianity first became the official religion of Roman London, with an official altar in the old municipal shrine'. But there is surely a much simpler explanation of the Saxon preference for the western area. It was not the presence of sub-Roman slum-dwellers on Cornhill which frightened them away: it was the much tougher obstacle of a wilderness of bricks, and mortar, and concrete that daunted their town-shy minds. The eastern hill was, as we know from Dr Wheeler, a built-up area: it had been thickly packed with great public buildings, temples, warehouses and tenements. Many of them were by now rat-ridden and dangerous ruins, the abode of the unfamiliar ghosts of an alien culture. No Saxon would willingly live in the peril of falling walls and the stench of blocked drains that he did not know how to clean. But west of the Walbrook, to quote Dr Wheeler, 'there is some evidence . . . that the extension of Londinium . . . was never very closely filled with buildings'. If it was necessary to settle within the walls at all, which was in itself an unusual concession to the importance of London's position, there could be no question of their choice of a site. It was in the open spaces which had once been the gardens and orchards of the west-end villas that they preferred to make their mud and wattle huts. There is nothing surprising in the choice at all: it accords perfectly with all that we know of the non-urban atmosphere of pagan Anglo-Saxon minds. And it has no necessary relevance to the question of Romano-British survival.

But what about St. Peter's-on-Cornhill? There is fifteenth-century evidence, perhaps based upon the dubious authority of a twelfth-century Lancashire monk, that St. Peter's had been an Archbishop's see for four hundred years before the coming of St. Augustine. Dr Wheeler thinks that this story is 'unlikely to have arisen subsequently to the establishment of the episcopal see at St. Paul's'. Now he has himself quoted with approval Dr Page's description of late Saxon London as a *cité* surrounding the Cathedral on the west and a *bourg* with its merchant population on the east. But it was precisely the

THOUGHTS ON TOPOGRAPHY OF SAXON LONDON

predominance of St. Paul's in the western *cité* which is likely to have given rise to such claims on behalf of the commercial interests in the *bourg* east of Walbrook for the antiquity of their own central and admittedly very early church. We are apt to forget the sudden development of racial antiquarianism which followed the Norman Conquest. The greater religious communities, of which St. Paul's was not the least, became after the work of Lanfranc and Anselm a great instrument of the cultural conquest of Saxon flexibility by the rigidities of Norman feudalism. What more natural retort for the burghers, in their passionate maintenance of liberties guaranteed them by the Conqueror, than to push back parochial St. Peter's to King Lucius, four hundred years before Augustine the Monk, and to claim for it a mythical archiepiscopacy, the only possible dignity which could surpass the prestige of the Cathedral Monastery. It is not at all surprising that we first hear of this tale in the twelfth century, for that is just the period when such tales were most in demand. And if we are asked for an alternative explanation of the position, dedication, and undoubted antiquity of St. Peter's-on-Cornhill we would reply that it was the deliberate policy of Augustine and the Papal missionaries to re-Romanize Britain by planting their churches in the old urban centres wherever that was feasible. And if in London they found it necessary to compromise by setting St. Paul's in that part of the town where already there was a nucleus of East Saxon settlers, yet they could hardly be expected to resist the temptation of building a St. Peter's in the ruins of the Roman basilica on the deserted side of the stream. The two dedications suggest in fact very strongly a single plan, and that not only probably but almost inevitably the work of Papal missionaries in what was after all intended to become one of the two metropolitan sees of converted England. Is it perhaps too fanciful to see in the placing of St. Peter's on the eastern hill a hint, so to speak, to the East Saxons to follow the Prince of the Apostles back to the ancient centre of London's earlier Roman culture? That the East Saxons did not take the hint is symbolic of much in London's—and in England's—history.¹

¹ Bede *H. E.* II, 3, mentions, it is true, only the building of St. Paul's by the missionaries, for, by his time, the traditional supremacy of that church was already firmly established, and it is characteristic of his historical method to give no unnecessary information. It is far more significant that he says nothing whatever of any sub-Roman population in London when Mellitus arrived. In the chequered history of the see during the seventh century such an element, if it had existed, would surely have played a noticeable part.

ANTIQUITY

But if it be admitted that the facts set out by Dr Wheeler are reasonably intelligible without the postulate of a surviving Romano-British population round Cornhill, there is at least one piece of positive evidence which makes any such survival extremely improbable. And that is the well-worn, but none the less powerful argument from the medieval street-plan. There is nothing more tenacious and ineradicable in a continuously inhabited urban area, than the main lay-out of its streets. Not even a Great Fire, such as that of 1666, will suffice to alter the traditional boundaries of contiguous properties which depend upon the maintenance of traditional lines of communication. If it was possible to argue that the chaotic street plan of medieval London east of Walbrook bore any significant resemblance to the carefully surveyed *insulae* of the Roman City, it would be extremely unwise to deny the probability of continuous occupation in some form or another. But in fact one cannot. And while it may not be difficult, in Dr Wheeler's picturesque conception, 'to imagine a 5th- or 6th-century Londoner muttering "Civis Romanus sum" as he put his stair-balusters on the kitchen fire', it is too great a strain on our credulity to imagine him and his fellows deliberately converting a grid-iron street plan into a chaos of curvilinear lanes in a misguided effort to conform with the reviving canons of Celtic Art. Such changes as the street plan of Roman London has undergone are only explicable by a period of abandonment—not necessarily absolute—but sufficient to allow of so great an obstruction of lines of communication by fallen masonry, blocked and bursting drainage systems, and the natural growth of vegetation, as to make them unrecognizable as such, when lines of human communication are again required. And such a situation is incompatible to my mind with the survival of 'an entity sufficiently living to transmit something of the Roman heritage to later times'.

Dr Wheeler does not tell us in this paper what he thinks that 'something' was. But if we turn to the July number of the *Antiquaries Journal*,² we shall find an indication of his line of thought. He there argues that the existence of the well-known Grim's Ditches in the Chilterns and in Middlesex, and of a similar earthwork in the valley of the Cray is only explicable on the assumption that there was a power in the Thames basin in the 5th and 6th centuries A.D. strong enough to prevent the influx from north, west and east of settlers anxious for

² *Ant. Journ.* XIV, 254.

THOUGHTS ON TOPOGRAPHY OF SAXON LONDON

good agricultural land. And that power can only be 'a dark age London still vital and watchful of her territorial interests'. And the result of such watchfulness was to hand on to twelfth-century Londoners of FitzStephen's time rights of hunting over a considerable area of the home counties. Here is something of the Roman heritage indeed.

Now I am not concerned at present to criticize this interpretation of the function of the Grim's ditches.³ But it may be worth while to set the conception of sub-Roman London which Dr Wheeler has based on them side by side with the impression left by his study of the Topography of London itself. On the one hand we have the successful assertion of rights over districts as far distant as Berkhamstead and Wallingford; and on the other an inability even to prevent the settlement of Saxons within the Roman walls of London itself. One picture shows us 'an enduring London capable from the outset of controlling the Saxon settlement of the London basin';⁴ the other 'a sub-Roman slum', precariously crouching behind the insecure frontier of the Walbrook. And if it be argued that the two pictures are after all not intended to be seen simultaneously, but one after the other, and that there is plenty of time between 410 and 604 for us to admire them both, I should heartily agree. There is plenty of time for them both even before 500: and I would venture to add a third to while away the century or so before the coming of St. Augustine—a picture that will include the vigorous exploitation of the Thames valley and its tributaries by

³ One obvious difficulty is to visualize a political situation in which London was strong enough to defend her territorial interests more than thirty miles away, yet so weak as to allow the intruders to construct their own frontiers: for it will be remembered that except for the Berkshire Grim's ditch, whose behaviour suggests that it may belong to a totally different chronological horizon, these earthworks all face towards London. If the Londoners were strong enough to insist on such lines being drawn, they were strong enough to draw them themselves. And was there any possible advantage which the Saxons could obtain by the labour? It is not the aggressor but the defender who has need of frontier defence.

⁴ This phrase can only mean that Dr Wheeler regards the undoubted early Saxon settlement of the Thames valley and its tributaries, evidenced by, for example, the partly cremation cemeteries of Croydon, Hackbridge, Shepperton, Aston and Reading, all of which must be within his London *Territorium*, as the outcome of negotiation and agreement with the Roman Londoners. It is difficult to see why they were so anxious to defend their rights in the far-away Chilterns while surrendering the control of much closer and more valuable land on their best line of communication—the river. I mention only the cremation cemeteries, because while cremation is *in itself* no proof of early date, its occurrence in an area so Romanized as the middle Thames valley is hardly explicable in any other way. Some of the inhumations here may be early too.

ANTIQUITY

Saxons unhampered by any restrictions from Roman London : and some very Still Life indeed upon Cornhill.

To sum up—I have ventured to suggest that there is nothing in the very interesting facts which Dr Wheeler has yet published⁵ on the Topography of Saxon London to necessitate or even strongly to suggest a survival of the Romano-British population in the eastern part of the City ; that there are certain factors such as the street plan which are very difficult to reconcile with continuity of occupation ; that his argument for continuity is really based upon his interpretation of the Grim's ditches ; that this interpretation if true points to situation in the Thames basin in the Pagan period inconsistent with his own picture of the relation of Saxon and Briton in London itself ; and that if to escape this dilemma we place ' the Grim's Ditch Period ' very early before the establishment of any Saxon settlement in London, then the reason for demanding continuity at all has disappeared.

There has been in recent years a very general movement in archaeological opinion on the relation of Briton and Saxon in these dark centuries. Rightly or wrongly we are nearly all much stronger ' survivalists ' than was thought at all proper even fifteen years ago. There is the greater necessity for very close examination of the arguments which have led us to our present position. We must beware lest our new course becomes a precipitate stampede.

⁵ His forthcoming publication on *London and the Saxons* is of course most eagerly awaited.

Mr Myres on Saxon London : a reply

by R. E. M. WHEELER

THIS is where Mr Myres and I don our cardboard armour, rattle our wooden sabres, and join battle to the death or tea-time.

Let me parry blow by blow, and, first, that one about the *street-plan*. I give that precedence because Mr Myres is (relatively) so serious about it. He regards the 'chaos of curvilinear lanes' which is the medieval street-plan of London as, above all, a 'piece of positive evidence' which makes any survival of Roman London through the Dark Ages 'extremely improbable'. As Mr Myres well knows, this argument goes back through William Page to Noah, and the only surprising thing about it is that Mr Myres should still find himself using it in this year of grace. The reply, in part at least, is almost equally ancient, but has never perhaps been developed as fully as the argument appears to deserve.

The essential answer to the question, 'What about the street-plan of London?', is to ask another question, 'What about the street-plan of Rome?' As a seasoned historian, Mr Myres is aware that, A.U.C., Rome has been abandoned 'to desolate and dreary solitude' for scarcely more than forty days all-told. And yet every tourist knows the lengths of destruction to which political antiquarianism has now to go in order to recover a small fragment of the classical street-system from the 'chaos' of the later plan. In Rome continuity of occupation has been consistent with an almost complete abandonment of 'the carefully surveyed *insulae* of the Roman city', and in Rome therefore may be found the absolute answer to the street-argument against continuity in London.¹

This answer is in reality emphasized by the seeming paradox that, in certain cities where a period of abandonment is likely to have occurred, the main lines of the Roman plan have nevertheless been maintained.

¹ The curious may find a convenient diagrammatic exposition of this point in Gordon Home, *Roman London* (1926), p. 151.

ANTIQUITY

Thus Bath, which, as the Saxon poet tells us, was in the eighth century a ruin wherein death had 'destroyed all', has to this day almost certainly retained the lines of its principal Roman streets.

The explanation of the paradox seems to me to be this. It was not mere negative desolation that broke up the Roman street-plan of London. Rather was it, as at Rome, the more positive disrupting influence of a continuous and comparatively dense occupation through a period of indifferent civic discipline. Had the well-built Roman Londinium in fact been abandoned and so, in a sense, petrified during the most chaotic century of the sub-Roman period, only to be reoccupied at the end of the sixth century by a civilized Saxon régime and revitalized by new contacts with Rome, then might we legitimately have expected to find some explicit recognition of the Roman plan in the Saxon and medieval city. It is difficult not to regard the absence of such recognition as evidence rather *against* than for a lapse of this kind, with the implication that the beginnings of the quaintly distorted plan of medieval London should be referred back to that sub-Roman slum wherewith I have been led to identify the London of the Dark Ages.

There is indeed slight evidence that, already before the end of official Roman rule in Britain, the symmetrical planning characteristic of Roman cities in their prime had begun to suffer modification. For example, in the small country-town of Caerwent, encroachments upon the main streets were numerous, and a whole side-street was actually blocked by the construction of a ramshackle amphitheatre. But in the country-towns, sited, as many of them were, astride main roads, a special factor conspired with the essential durability of Roman masonry to maintain at least a nucleus of the Roman street-plan. That factor was through-traffic which, however variable in bulk, followed down the ages the Roman main-roads both across the countryside and through the towns (however derelict) from gate to opposite gate. Thus in some degree have the axial streets of outlandish Roman fortresses such as Chester, or, as we have already observed, of once-derelict towns such as Bath, been preserved as the axes also of the modern street-plan. But the case of London was different. London was never a mere incident on a through-route. Even today, the number of persons who merely pass through London, as through so much streetage or railway-tunnel, must be relatively small. London is, by virtue of her geographical position and her size, a focus, a distributing centre, a starting-point, but not a roadside city. That is, of course, why there is no real street-axis in the city of London, and why it has been necessary

SAXON LONDON: A REPLY

in modern times, with the vast expansion of London, to impose new main streets—King William Street, Queen Victoria Street—upon the ancient plan. In the words of an ex-Minister of Transport: ‘The biggest traffic problem of London is not how to get out of London, but how to get through it’.²

Two factors, then—the dislocation which might reasonably be expected at the hands of an ill-controlled, impoverished and predatory Dark-Age population, and the absence of the corrective stimulus of through-traffic—may be urged in explanation of the disharmony of the Roman and medieval street-plans of London. But the analogy of Rome teaches us sufficiently to beware of using that disharmony as evidence of discontinuity, and the argument to that effect may safely be dismissed as irrelevant.

Other points raised by Mr Myres require less discussion. The probability that the western hill was less encumbered by Roman buildings than the eastern was doubtless a contributory cause in the concentration of early Saxon settlement upon that hill, and I have in point of fact implied this on p. 301 (read in conjunction with p. 292) of my paper. But the suggestion that St. Peter’s Cornhill was not, as the medieval citizens believed, a Roman survival, but rather an unrecorded foundation of the Gregorian mission, designed to balance the new St. Paul’s on the opposite hill, carries guesswork further than even I am prepared to go. The ecclesiastical antiquarianism of the twelfth and thirteenth centuries is of course notorious, but I can find no hint in the early medieval history of London that there was, as between the two halves of the city, any such violent antagonism as is likely to have prompted so extravagant a claim *de novo* on the part of the denizens of Cornhill. In this absence of any adequate motive for imposture, I prefer to pin my faith to a seemingly established twelfth-century tradition—a tradition so firmly established, indeed, that it was known even to a remote Lancashire monk—than to an entirely unattached guess of the twentieth century. If a historical environment be required for the complementary dedications on the twin hills, it is easy enough to conjecture that the Romano-British St. Peter’s derived its dedication from that of the premier church of Rome itself, and that when the Gregorian mission came to establish its new cathedral on Ludgate Hill it chose the dedication to St. Paul from an instinctive sense of harmony.

² Mr Herbert Morrison, as reported in *The Observer*, 4 February 1934.

ANTIQUITY

Then Mr Myres turns aside from the strait and narrow path of my ANTIQUITY article and entangles himself in a recent paper of mine on the Grim's Ditches of Bucks, etc. In that paper I tried to set forth certain quite explicit reasons for *not* ascribing these ditch-systems to any period other than the early post-Roman phase. Those reasons hold the (otherwise vacant) field until they are countered by equally explicit point-to-point argument. Generalities as to whether they do or do not fit in with any premised political situation in London or the Thames valley are of no value, since we have not, as Mr Myres and I must equally admit, the foggiest notion from historical sources what that political situation in the fifth and sixth centuries really was. If my arguments, based mainly on a study of geological and geographical environment, are sound, then we may legitimately amuse ourselves afterwards by inventing some sort of political situation to fit them. But before doing so let us, for the love of Mike, get rid of some of the notions which here appear to cloud Mr Myres's usual clarity of thought. He complains, in particular, of the difficulty of visualizing 'a political situation in which London was strong enough to defend her territorial interests more than thirty miles away, yet so weak as to allow the intruders to construct their own frontiers'. But that is exactly what a generation of field-archaeology and two thousand years of history have taught us to expect! Frontier-dykes were normally put up by the intruder (in this case, *ex hypothesi*, the Saxons from the north) to define conquests or claims: witness Offa's Dyke put up *not* by the brow-beaten Welsh but by the victorious Mercians—not to mention Hadrian's Wall, which has never, I believe, been ascribed seriously to the Picts and Scots. And the word 'defend' in Mr Myres's sentence has an ominous ring about it, not lessened by the further statement that 'it is not the aggressor but the defender who has need of frontier defence'. I strongly (but perhaps wrongly) suspect that Mr Myres is here still imbued subconsciously with the studious strategy of the conventional histories. Does he seriously imagine that these interminable dykes were really intended for defence—that the hundred miles of Offa's Dyke, for example, really protected an otherwise vulnerable Mercia? Of course they didn't, and of course Mr Myres knows they didn't. The dykes must have impeded cattle-driving, but otherwise they could no more prevent incursion than the white line can prevent a determined motorist from taking a corner on the wrong side. They were a simple and obvious expression of territorial adjustment in an illiterate age, and as such were laid out normally (not always without concession) by the

SAXON LONDON : A REPLY

more active and aggressive of the negotiating parties. They were not, in any significant sense, defensive battlements.

And then, again, this slum-business. When I speak of my sub-Roman London as a 'slum' I am comparing it mentally, not with the condition of the contemporary Saxon settlements (which must have been indescribable), but with the London of the best Roman period ; say, the second century A.D. In the sixth century, even a tumble-down London can easily have been still a triton among the minnows of that squalid age. It had walls and buildings stout enough to turn the pick of the modern builder, it had a tradition strong enough to fashion the policy of Pope Gregory, and, if its plumbing was by then somewhat defective, history shows abundantly that sovereignty is not conditioned by h. and c. I need not labour this point, but I admit that I should have defined my phraseology more clearly.

Nor need I prolong this over-long reply by entering upon a discussion of the vexed question of the Saxon cemeteries, save for one point. All that we know of the social and political conditions of the migration-period goes to show that cultures and societies co-habited at this time in a curiously casual manner which is often devoid of serious or lasting political conflict. Examples from fifth-century Gaul will leap to Mr Myres's mind ; and it is somewhat on the lines of fifth-century Gaul that I find it easiest to reconstruct a picture of London and Kent about the year 500. The temporary or even enduring presence of small communities of Teutonic farmers, particularly in the vicinity of the arterial river, is entirely in this picture, and does not necessarily carry with it big political implications. Politics and strategy are the curse of the older historians of early Britain, and it is as necessary as it is difficult for us to lay the curse. Mr Myres, by training a historian and by inclination also an archaeologist, is, above all, equipped for the task of reshaping this tradition, and it is to be hoped that he will, before long, substitute for negative criticism a positive and constructive study of a period which so badly needs him. . . . But now it's tea-time.

Ur Excavations: a review*

by E. A. SPEISER

University of Pennsylvania

IN recent years Ur has figured prominently and often as an important witness of the Great Flood of prehistoric times. But whatever may have been the cause and extent of that particular upheaval, it appears that the ancient city perished, paradoxically enough, for lack of water. A sudden shift in the course of the Euphrates probably doomed to desiccation the strip of land on which Ur had risen to become at length a powerful royal centre. That fitful whim of a lazy river may be placed at some period near the end of the pre-Christian era. By that time, however, Ur had endured for perhaps as long as five millennia. Nothing short of a natural catastrophe, it would appear, could bring to a close a career of such heroic proportions.

But today our interest centres neither on the foundation of the city nor yet on the precise manner of its destruction and abandonment. Both events pose problems that call for far too much speculation. To the student of antiquity the known facts of the cultural and political history of Ur will be no less fascinating and absorbing. That so much information is now available is due primarily to the work of the archaeological expedition of the British Museum and the Museum of the University of Pennsylvania, which has just concluded its twelfth season of excavation at Ur under the direction of Dr Woolley. Preliminary reports of seasonal progress are available in the vivid annual reports of the Director. In addition we have the definitive account of the results obtained at al 'Ubaid (*Ur Excavations*, vol. I), and now comes the splendid publication of the finds from the 'Royal Cemetery'.

* *Ur Excavations*, vol. II. The Royal Cemetery. A report on the Predynastic and Sargonic graves excavated between 1926 and 1931. By C. Leonard Woolley.

Publications of the joint expedition of the British Museum and the Museum of the University of Pennsylvania to Mesopotamia. Part I, text pp. xx, 604, with 83 drawings in text; Part II, 274 plates of which 37 are in full colour. 1934. (British Museum Agents, £4 4s).

UR EXCAVATIONS : A REVIEW

The subsequent volumes of this series will be awaited with the keenest interest.

There are two main reasons why the early cemeteries of Ur are of outstanding importance. One is the nature of the finds as such, and the other lies in their strategic chronological significance. To consider first the intrinsic value of the objects, they are almost unending in their variety, while generally excellent and at times extraordinary in quality. No description of a few selected specimens can convey a remotely adequate idea of the wealth of the entire yield. In short, the antiquities should be seen in the museums of Baghdad, London, and Philadelphia, if they are to be appreciated fully. The next best thing is to study them from the fine colour plates prepared by Miss Louise Baker, and from the descriptive account of the discoverer. But Woolley has furnished more than merely a competent commentary to his finds. His happy style enables the reader to breathe some of the excitement attendant upon the various discoveries and to appreciate the skill and the infinite patience required in the exhumation, study, and the ultimate preservation of each piece. In all these departments the author is an acknowledged master. Contributions by Mrs Woolley, Sir Arthur Keith, Rev. E. R. Burrows, Dr L. Legrain and Dr H. J. Plenderleith, help to make the publication a really representative one.

In addition to supplying us with a remarkably rich and complete picture of contemporary civilization, the finds from the Ur cemeteries help to mark an epoch which is scarcely surpassed in significance by any other in the long cultural history of mankind. For whatever may be the absolute date of the cemeteries, their relative chronological position is clear enough. The period from which they date marks the end of the prehistoric or archaic stage and the beginning of history proper. This is not simply an arbitrary distinction based solely upon our own knowledge of the times, the dividing line receding as our information increases, but rather a milestone in the life of mankind which is not likely to suffer henceforth any serious shifts. It is becoming increasingly plain that the realization of the potentialities of writing and metallurgy, as opposed to casual experiments along these lines, signifies the introduction of the historical age. Now, on evidence from a series of sites in the Near East, both these factors emerge from the experimental stage at a time corresponding to that of the early Ur cemeteries. The tempo of life has been appreciably quickened by these developments, an industrial and culture revolution that has made man literate and metal-conscious. This contrast between the prehistoric

ANTIQUITY

and the early historical deposits is perfectly evident to any excavator who has dealt with mounds in which both stages are represented ; it is proclaimed by the very nature of the débris. In this light the finds under discussion, astounding as they are in their own right, assume an enormous contextual significance. In terms of relative chronology they mark the apex of the life-curve of Ur. For the length of the occupations that follow is neatly balanced by the number and depth of the preceding archaic strata.

Thus far our reaction to the handsome publication by Woolley has been one of warm appreciation. Such an attitude is amply justified by the wealth of unusual finds, expertly reclaimed and very well presented. It is not until we come to the author's interpretations that we find room for the exercise of critical tendencies. Sooner or later in the account of his results the archaeologist is called upon to reassemble his established facts into a picture of contemporary life against the political and ethnic background of the age and area in question. Probabilities become intricately interwoven with personal opinions, and the circumstance that such opinions may be entirely consistent with logic fails to invalidate or render improbable views that may be at variance with the author's conclusions. In this respect the present publication is intensely stimulating.

The very title of the work lends itself to legitimate dispute : was the cemetery a burial ground of royalty ? Woolley is well aware of the problem and he takes it up at considerable length in chapter III. It is true that Mes-kalam-dug bears the title *lugal* ' king ' and that Shub-ad is termed *nin* ' queen, princess '. But the extant king-lists know nothing of Mes-kalam-dug and his group. Woolley would get around this difficulty by pointing out that the rulers in question antedate the first historical dynasty of Ur. Since this assumption merely postpones the issue without settling it all, the author is forced at length to suggest (p. 218) that the interred dignitaries were not independent kings, but rather vassals subject to the rulers of the First Dynasty of Erech. This is very much of a *tour de force* because the Erech dynasty is as plainly mythical as the First Dynasty of Ur is historical. For whereas the members of the latter are assigned normal regnal terms by the king-lists, the Erech fathers are semi-divine figures boasting life-spans of astronomical proportions. Then there is the difficulty arising from the abundance of human sacrifice in connexion with the principal Ur burials. In the mass of available written documents from Sumer there is nothing suggestive of such a practice following the death of a king.

UR EXCAVATIONS : A REVIEW

On the other hand, there is much to support the view of Sidney Smith, Fr. Böhl, and lately also of Frankfort (cf. *Iraq*, I, 12, note 3) that the deaths resulted from ceremonies in connexion with the Sacred Marriage ritual. The principal occupant of a tomb would thus be not a king but a priest or a priestess, the attendants representing victims sacrificed to and in the name of the god of fertility. This picture is wholly in harmony with all that we know about the spread and the popularity of such fertility cults. Without a powerful religious element of this sort the pretty picture which Woolley has drawn of the groups advancing in rapture to a voluntary death cannot but strike the reader as unduly fantastic.

Next comes the question of the date of the tombs. Woolley clings tenaciously to his original view that the earliest burials go back to 3500 B.C. The elusive absolute date need not concern us at present. What matters just now is the author's insistence that the tombs antedate the First Dynasty of Ur by as many as four and five centuries in some cases. To this theory we are unable to subscribe. As is well known, some scholars have assigned to the burials a date later than that of the First Dynasty, primarily on stylistic grounds. We are citing this rival hypothesis in order to indicate that stylistic arguments based on a comparison of the cemetery-finds with material from other Sumerian sites are not necessarily in favour of an extremely early date for the tombs. To be sure, the German school which sponsors the late date may have gone to the other extreme. At all events, it is difficult to escape the conviction that the Ur burials belong to a period closely linked to that of the First Dynasty. It should be added that at Erech, Tell Asmar, Tell Billa, and Tepe Gawra, in all of which early dynastic deposits have recently been unearthed, analogues of both the cemetery and the First Dynasty finds have been discovered side by side. Mes-kalam-dug, Woolley argues, is not included with the rulers of the First Dynasty. If that dignitary was a king, he must represent therefore an earlier dynasty, since a later historical period is out of the question. That may be so if the burials actually represent royal tombs. But if the Sacred Marriage hypothesis is accepted, the chronological difficulty disappears automatically. If an approximate absolute date is required, 3000 B.C. is as high as is necessary to go. There remain certain problems of stratigraphy, but they are not all-important in the case of burials.

In a chapter on 'General Results' (xxii) Woolley pays a glowing tribute to Sumerian civilization. The sum of achievements of that talented and ever-mysterious people cannot easily be exaggerated, but

ANTIQUITY

it is possible nevertheless to overstate some details. The author says that 'to the Sumerians goes the credit for having worked out all the basic architectural forms in use today' (p. 393). Has he taken into account the material from Gawra VIII-X which is certainly non-Sumerian and predynastic? The phrase 'if the al-'Ubaid people are, as they seem to be, Sumerian' (p. 398) is somewhat alarming in view of Woolley's earlier and repeated protestations that they were not of that group. A change of views as radical as in this instance should not be expressed without adequate supporting arguments.

Here and there the author is quite inconsistent. A glaring example is furnished by his discussion of Shub-ad's head-dress. In commenting on the alternative rearrangement proposed by Dr Legrain, Woolley objects to the use of Third-Dynasty material for the reconstruction of 'Royal Cemetery' ornaments, although elsewhere he makes frequent use of the argument from Sumerian and Mesopotamian conservatism (we fail to see where Mesopotamian civilization was so abnormally conservative).

A number of details could be argued either way. There is no justification, however, for giving the name of the Lagash ruler as Ur-Nina; the correct form Ur-Nanshe has been known for several years.

In conclusion I would point out that many of the photographs are not up to the standard of the rest of the work. This is not due to faulty reproduction, for the negatives that I have been able to compare are much poorer than the prints. Few expeditions have at their command resources sufficient for an all-round expert staff. But after Woolley's splendid work had attracted its due share of attention, the Director should have procured a competent photographer. Lastly, the binding of the volumes is inexcusably flimsy. A very small additional outlay would have ensured for these books the type of cover that they so richly deserve.

Notes and News

HITTITE SCRIPTS

The following note as to the progress of decipherment of Hittite hieroglyphs, written by Professor W. F. Albright for *The Bulletin* of the American Schools of Oriental Research, April 1934, is reprinted by permission of the Editor of the Bulletin :—

‘ The history of the decipherment of the ancient oriental scripts and languages began in 1802, when the first successful efforts to solve the mystery of Egyptian hieroglyphics and Persian cuneiform were made. The decisive stage in the decipherment of Egyptian came in 1822, with Champollion’s famous letter to M. Dacier, and that of Assyro-Babylonian followed in 1846–1851, with the work of Hincks and Rawlinson. Meanwhile the decipherment of Phoenician had been brought to a successful conclusion in 1837 by Gesenius, and the decipherment of South Arabian was begun about the same time by Rödiger. Since those heroic decades many other scripts and varieties of previously known script have been successfully interpreted, and our knowledge of the numerous languages and dialects which were written in them has steadily increased. Yet the day of diminishing returns has not yet come, and new scripts are being discovered more rapidly than those already known can be deciphered. In Byblos, for instance, three new scripts have been discovered during the past few years ; none of them has yet been read. The discovery of North-Canaanite cuneiform* in 1929 and its dramatic decipherment in 1931 are familiar.

‘ During the middle decades of the past century a number of inscriptions in strange hieroglyphic characters were discovered in southern Asia Minor and northern Syria. The late A. H. Sayce began their decipherment in 1877, calling them “ Hamathite ” at first, and later “ Hittite ”—a brilliant guess which has proved quite correct (using the term in the same way as it is used in the Bible and the contemporary Assyrian inscriptions). Sayce’s efforts at decipherment were not,

* See ANTIQUITY, II, 87–8; III, 350; IV, 464; V, 114, 245, 405–14.

ANTIQUITY

however, attended with enough success to convince other scholars. Nor were those of his successors, Ménant, Jensen, Six, Peiser, Campbell Thompson, Cowley, Frank, and others, productive of more concrete results. Between them these scholars were able to accumulate a good many correct ideas, but it was not possible to say which idea was right and which was wrong. The difficulties in the way of successful decipherment appeared to be so great that Sayce finally concluded that several different languages were employed in the Hittite hieroglyphic inscriptions, while Jensen gave up his own decipherment, adopting a wholly new view, and considering the outlook for solution of the puzzle as practically hopeless.

‘Meanwhile the cuneiform Hittite tablets discovered by Winckler at Boghazköi had been deciphered by Hrozný of Prague in 1915, and this scholar, ably seconded by Forrer, Friedrich, Götze, Sommer, and others, was able by the year 1928 to interpret these texts in detail, and to work out complete grammatical and lexicographic systems. Several languages were discovered, Nasian or Nesian (in which nearly all the tablets were written), Luyyan, Hurrian, Hattic, Palaic. The new appreciation of the complex linguistic situation then existing in Asia Minor, made the prospects of deciphering the hieroglyphic inscriptions more problematical than ever.

‘In 1928 a new period began, that of successful decipherment of these enigmatic texts. In that year Meriggi read a paper (published in 1930) on the subject before the Hamburg Orientalistentag, in which he applied a more rigorous method to the task than had hitherto been employed, and succeeded in explaining several groups of characters as genealogical series of kings. Shortly before, the writer had finally succeeded in giving what seems to be the correct reading of the cuneiform inscription of the bilingual “boss of Tarkondemos,” which he read as “Tarqumuwa king of the land of the city of Mera” (previously read *Tarqutimme*, *Tarriqtimme*, *Tarquwasheme*, etc., and *Erme*, *Mê*, *Meya*, *Metan*, etc.). This reading, which has since been accepted by practically all competent scholars, was adopted in part (later entirely) by Meriggi, and furnished him a new *point d'appui*.

‘In 1931 Forrer and Gelb presented new, independent systems of decipherment at the Leyden Congress of Orientalists; both were published within the following year, and gave a great impetus to work in the field. Meanwhile, in 1930, the writer had established the existence of an important Anatolian goddess, Kubaba or Kupapa, Greek Kybebe (a form of Cybele). Taking the place-names and personal

NOTES AND NEWS

names of men and gods now recognized as such, and making a number of extremely happy new identifications, Bossert published in 1932 a monograph, *Santaš und Kupapa*, in which he placed the decipherment of the hieroglyphic inscriptions on a solid basis. This was followed by a series of articles by Meriggi and Bossert, supplemented by a new and partly independent decipherment by Hrozný (1933), in which appeared numerous additional discoveries which have greatly extended the scope of our knowledge. Some fifty phonetic characters and many ideograms can now be read with more or less confidence; many personal and place-names have been correctly read, and a great many grammatical forms and particles are explained (though often only approximately). The greatest single handicap is our ignorance of the vocabulary.

‘Clear summaries of the results already obtained, with sound methodical discussion, will be found in a review by Sturtevant, *Language*, 1933, 273–9, and an article by Dhorme, *Syria*, xiv (1933, published in March 1934), 341–67. The language is unquestionably related to cuneiform Hittite (Nesian), and it seems to be a dialectic variant (or a group of dialects belonging to the stock) of Luyyan, which was spoken in southern Asia Minor and northern Syria in the second millennium B.C.

‘The value of the complete decipherment of these inscriptions for our knowledge of the ancient history of Syria, as well as for biblical studies, is evident’.

MESOPOTAMIAN ARCHAEOLOGY

Dr R. E. MORTIMER WHEELER writes to *The Times* (11 October) as follows:—‘The extensive and fruitful archaeological exploration which has in recent years been carried out in Mesopotamia by British and other expeditions has not yet received adequate recognition in the curricula of the English universities, and special attention may therefore be drawn to two courses which have recently been arranged in the University of London, under the auspices of the newly-constituted University Institute of Archaeology. The first of these is a two-year course on the archaeology of Mesopotamia, under the direction of Mr. Sidney Smith, Keeper of Egyptian and Assyrian Antiquities in the British Museum, and Professor S. H. Hooke, Samuel Davidson Professor of Old Testament Studies in the University of London. The second is a course of six general lectures, designed for a wider public, by Dr C. Leonard Woolley on “Ur and the Development of

ANTIQUITY

Sumerian Art " at the Courtauld Institute of Art, Portman Square, beginning on October 29. Further information in regard to both courses may be obtained from the Secretary of the Institute of Archaeology, Lancaster House, St. James's, S.W.1'.

PREHISTORIC OX-YOKING

From time immemorial oxen have been yoked in pairs for working. The reason for this is three-fold : (1) for centuries oxen have been trained by yoking a partially broken animal with a trained one, as described by Varro, 'imitando enim facilius domatur' (RR., I. 20, § 2) ; (2) being creatures of habit, cattle thus work better in pairs than singly—and for heavy work one ox is not enough ; (3) it is easier to make a yoke for two oxen than to contrive harness for one. Early evidence for yoking in pairs is found :

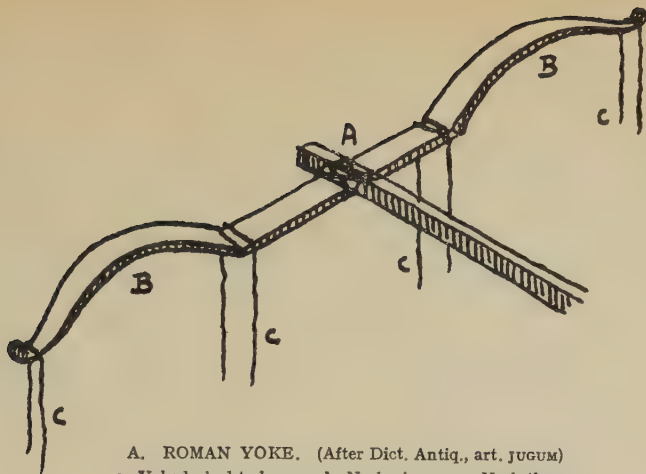
(a) in rock carvings of Copper or Bronze Age in the Alpes Maritimes, where oxen are depicted yoked with a straight bar across the neck. (Burkitt, *Our Early Ancestors*, pl. 28, fig. 1).

(b) in a Bronze Age model of a ploughing scene from Cyprus, with a similar yoke (MAN, 1933, 134).

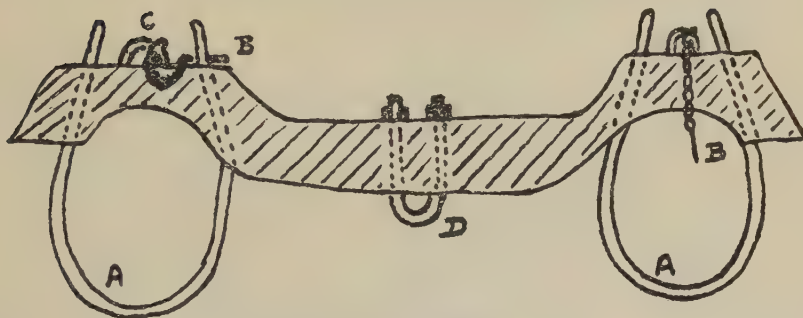
(c) in various Egyptian representations, e.g. with a straight bar lashed to the base of the horns, as in Wilkinson, *Ancient Egyptians*, 1854, figs. 358, 366, 368 ; or with curved wooden (?) shoulder-pieces fastened under the neck, as in the Papyrus of Kamara (21st dynasty).

Lashing the yoke to the horns cannot have been a universal method, because all oxen have not suitable horns, and horns that curve downwards over the cheeks, besides being often naturally loose, are unsuited to this type of yoking. Since a sudden strain is liable to break even firm horns, this method can only have been used for the lightest work.

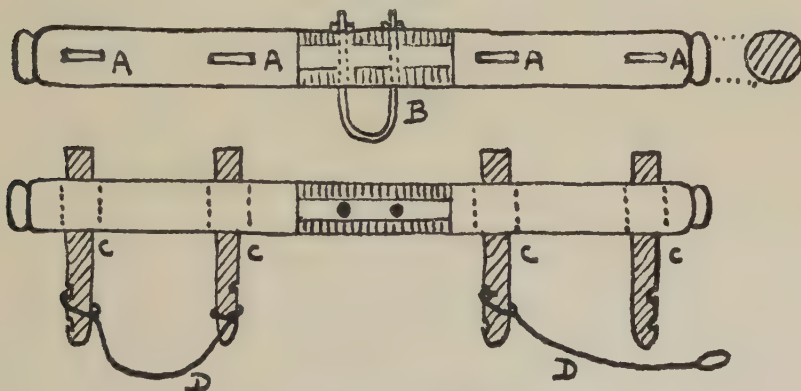
Roman yokes consisted sometimes of a straight flat bar tied to the neck with a leather collar, and sometimes of a bar with curved ends fastened with thongs (FIG. 1, A). The earliest form of yoke was no doubt, like the Bronze Age yokes already mentioned, a straight bar held in place by a leather thong passing under the neck, and either tied to the yoke as in FIG. 1, A, or put through holes as in FIG. 1, B. Modern ox-yokes are often unnecessarily cumbrous, like the Sussex yoke in FIG. 1, B (*Reliquary*, 1905, XI, 222). In South and East Africa we use a straight bar 5 ft. long, with slots at regular intervals to receive four notched wooden pegs (skeys), to which are attached looped thongs of twisted leather (strops). (FIG. 1, C).



A. ROMAN YOKE. (After Dict. Antiq., art. JUGUM)
a, Yoke lashed to beam. b, Neck-pieces. c, Neck-thongs



B. SUSSEX YOKE. (After 'Reliquary', xi, 222)
a, Ashwood collars. b, Peg attached by chain c to hold collars. d, Staple for draught chain



C. MODERN EAST AFRICAN YOKE
a, Slots. b, Draught staple. c, Wooden pegs put through slots a. d, Neck-thongs

FIG. 1

Scale: 0 1 2 3 4 feet

ANTIQUITY

The ancient method of fastening the yoke to the plough-beam, simple enough if you have an iron staple, is more difficult. The prehistoric yoke may have been lashed to the beam, as in FIG. 1, A—a bad method, since an unduly rigid yoke is liable to cause sore necks; or it may have been fastened by a leather link between two loops fastened to the yoke and the beam respectively (FIG. 2.)

One ox is not enough for all kinds of work, and, indeed, the tractive-power of an average ox is less than two-thirds of that of a horse.

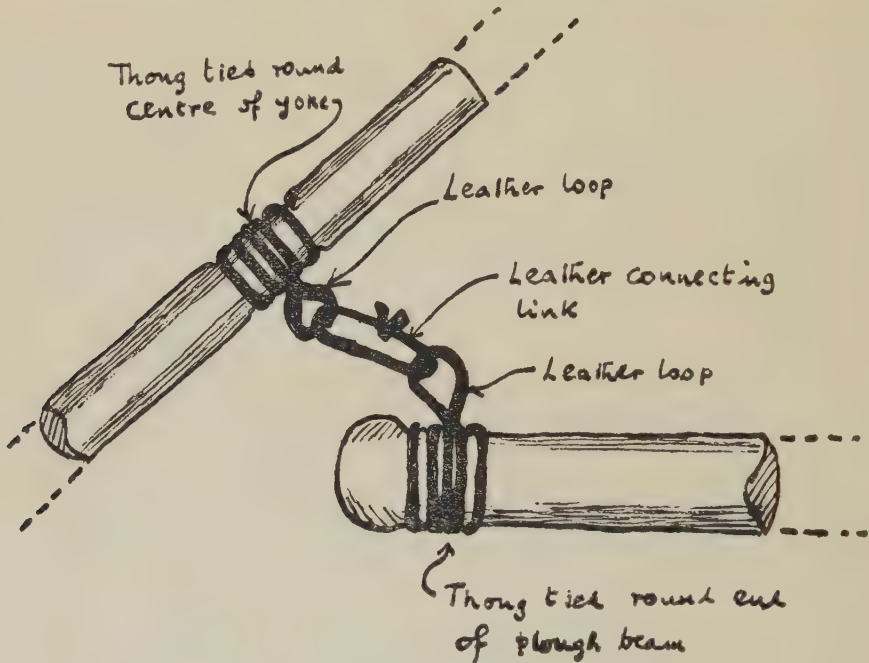


FIG. 2. SUGGESTED ALTERNATIVE METHOD OF FASTENING YOKE TO PLOUGH-BEAM

(Cf. McConnell, *Agricultural Note Book*, ed. 9, p. 54). Thus the common single-row horse-hoe is pulled by one horse, but requires two oxen; one ox *can* pull it, but does less than half an acre a day, as against $2\frac{1}{2}$ acres with two oxen; and even the lightest form of steel plough with a head-wheel requires two oxen. The following figures of the draught, weight, and acreage of tillage implements used today in Kenya may be useful in estimating ancient cultural operations :

NOTES AND NEWS

	Weight	Draught	Acres in 8 hours
Very light plough - -	85 lbs.	2 oxen	$\frac{1}{2}$
5-tine horse-hoe - -	67 "	2 "	$2\frac{1}{2}$
1-furrow mouldboard - -	365 "	10 "	1
2-furrow disc plough - -	1150 "	12 "	$1\frac{1}{4}$
3-furrow disc plough - -	1350 "	16 "	2
Tooth harrow - -	182 "	6 "	—
16-disc harrow - -	900 "	8 "	—
5-furrow disc plough - -	2050 "	[30 BHP. tractor]	12 [10 hours]

These figures of draught and acreage are from my own fieldwork ; that of the tractor is computed from an average speed of $2\frac{1}{2}$ MPH.

G. W. B. HUNTINGFORD.

POND BARROWS

This, not very happy, name was given by Colt Hoare, in place of Stukeley's 'inverted barrows', to certain artificial depressions which can best be described in Hoare's words :—

'They resemble an excavation made for a pond: they are circular and formed with the greatest exactness; having no protuberance within the area, which is perfectly level'.

It is equally true to say that they resemble a natural spring-pond or bourne-hole, when dry (see *Wessex from the Air*, p. 249 and references there given).

The following is a list of pond barrows in Wiltshire, based on Canon Goddard's List of Prehistoric Remains in *Wilts. Arch. Mag.*, Dec. 1913, xxxviii, 153-378.

DURRINGTON, Goddard 10. Near a large group of barrows.

PRESHUTE, G. 9. 'A deep pit surrounded with bank' at the end of a line of 5 barrows.

WINTERBOURNE STOKE, G. 3a. Touching the ditch of a large bell-barrow (4), one of a numerous group.

—— G. 12: site 7a. This pond barrow is close to a barrow (8) showing an unusually elaborate interment.

—— G. 23. Near the end of a line of barrows 1-10 and 22.

BISHOPS CANNINGS, G. 14. 'A circular pit beautifully shaped', fourth in a line of five.

WILSFORD (S. Wilts.), G. 82 (12, 13, 14, 15). Of these 82 (12) is the one exception to the rule that pond barrows yield no remains. It contained 'a circular cist with burnt bones'. The whole neighbourhood is a barrow-field.

ANTIQUITY

It is fairly certain that the list is not complete : a pond barrow is very inconspicuous and might easily be passed over as a small chalk-pit. Colt Hoare writes ' we generally find one or more of these barrows in the detached groups '.

The absence of remains was emphasized by Thurnam (*Archæologia*, 1869, XLII, 167). Apart from the Wilsford example, he knew only of one ' bit of red pottery ' found by Stukeley, and a fragmentary interment (probably long subsequent) found by himself. He agreed with Stukeley's conjecture that they were in some way connected with the cult of the dead. I should like to carry this conjecture further. In its simplest terms the problem is : what is the relation between a Pit and a Grave-field ?

We happen to have good literary evidence for the association of Pits with Ghosts in the Bronze Age. When Odysseus goes to the kingdom of Persephone to get advice from the dead prophet Tiresias, his instructions from Circe, which he punctually executes, are to dig a pit (*βόθρος*), a cubit each way, to pour a libation (*χοή*) about it to all the dead, and to vow an offering on his safe return home. Then he takes the sheep he had brought for the purpose, and cuts their throats over the pit. Thereupon the ghosts gather round. But Odysseus, sitting sword in hand by the pit, allows none of them to drink the blood until Tiresias appears, drinks, and so becomes capable of speech (*Odyssey* XI, 25-50 ; 97-99).

In historic Greece the same association is apparent in the festival of the Anthesteria. The three days of this spring feast are the Pithoigia (the opening of casks), the *χόες* (cups : compare the *χοή* offered by Odysseus) and the *χύτροι*. This last word is specifically used of natural depressions in the ground—bathing pools ; hollows. It is equated in Pausanias (IV, 35, 9) with *κολυμβήθρα*=a pool, and in Theophrastus (*Hist. Plants*, 4, 11, 18) with *βάθυσμα*=a depression. A Greek would have called one of the bourne-holes on the downs a *χύτρος*. And from Suidas we get the valuable scrap of information that the closing act of the festival was the cry :

θύραζε κῆρες· οὐκέτ' Ἀνθεστήρια.

Ghosts, be off : Anthesteria is over.

Thus in both cases we have the same elements : (1) a pit or hollow, (2) a libation, possibly, in its later form, a drinking bout ; (3) communion with the spirits of the departed. My suggestion is that a pond barrow is just such a *βόθρος* or *χύτρος* as early Greek ritual required to bring the ghosts up from the underworld and to dismiss them by. This

NOTES AND NEWS

would explain (a) its regular association with a grave-field ; (b) its careful construction ; (c) the almost complete absence of material remains. The Greek ritual suggests that when there was no natural access to the underworld (such as a limestone country provides abundantly) a substitute might be made by digging a pond barrow.

G. M. YOUNG.

ARCHAEOLOGICAL WORK IN THE U.S.S.R.

The *Moscow Daily News* reports (no. 673, 27 July 1934, p. 2) that several archaeological undertakings were to be launched during the past summer and autumn. 'The Central Asiatic expedition will carry on interesting excavation work in Ferghana and Khoresm ; at the same time it will collect data on the irrigation systems which formerly existed there, thus facilitating planning of new canals. At the request of irrigation organizations, this expedition will also determine the direction in which the restless Amu Daria river is shifting its bed. . .

'Archaeologists will further lend a hand to geologists in Eastern Siberia where no tin deposits are known at present, but where a number of bronze articles have been found containing a large percentage of this metal—evidently obtained in the vicinity of Minusinsk.

'An expedition which will work in the regions to be flooded by the construction of the Volga-Don canal will for the first time investigate thoroughly what remains of Sarkel—capital of the Khazar kingdom destroyed by the Slavs in the 10th century, which at one time was as important a trading centre as Kiev in the 10th to 12th centuries. The expedition will further compile a history of the construction of the Volga-Don canal (attempts to connect the two rivers were made by the Turks in the 15th century and by the Russians under Peter the Great).

'In Siberia, excavation work will be carried out on a large scale on the sites of the paleolithic settlements which will be flooded when the Angara dam is constructed.

'It is hoped that excavation of ancient settlements located in the vicinity of the Yaroslavl dam, now under construction on the Volga, will help solve the problem of the origins of the Slavs. . .

'An opportunity to study the remnants of Greek colonies which once existed around Kerch, Crimea, is also offered by the extension of iron ore mining there which entails the removal of the entire upper soil layers.

'A sum of 300,000 roubles has been assigned for the work of the above expeditions, most of the funds being supplied by the

ANTIQUITY

administrations of the constructions job concerned'. The value of this sum at the official rate of exchange would be about £52,000; but actually the internal value is very much less.

We have only two comments to make on this programme. The first is to express a hope that here, as in the industrial undertakings themselves, the co-operation of foreign specialists will be obtained. Today the technique of excavation has advanced to a stage far beyond the low level of tsarist Russia. For instance, the Central Asiatic expedition should begin by air-photographing the district where ancient irrigation systems are found. This should be an indispensable preliminary to their campaign.

Secondly, we hope that full and adequate publication of results will follow at the earliest possible date. The diffusion of knowledge is as important as its advancement. We hear from time to time that archaeological activities are under weigh in the U.S.S.R.; but there as a rule the matter ends. Failure to publish results is the besetting sin of excavators; we hope it will not blight the promising beginnings of socialist science.

O.G.S.C.

MINES AND GEMS

In working through the literature of Roman mining in Britain I noticed a coincidence which may have some significance and to which, as far as I know, attention has not been drawn.

From the Roman lead-mining centre at Charterhouse on the Mendips some fourteen engraved signet gems, which are illustrated by Haverfield (see below), have been obtained, attributed to the first century; and from Bath a horde of 28 gems, some of which are rudely executed, accompanied by a 'first brass' of Titus. These particulars are taken from Haverfield's 'Romano-British Somerset' in the V.C.H. (*Somerset*, I, 252, 337, fig. 93), where references are given.

The first record is remarkable for a mere mining village; the second is easily explained as a dealer's stock for sale to visitors. Could the gems have been engraved at Charterhouse for sale at Bath, the nearest likely market?

In South Wales Roman occupation of the gold mining area of Dolaucothy probably began by A.D. 80. One of the finds is an onyx seal set in cement for engraving and still in an unfinished state; one gold trinket was set with a sard and several were ready to receive stones

NOTES AND NEWS

(see Wheeler, *Prehistoric and Roman Wales* and refs.). Here it seems certain that someone connected with the mining engraved gems, presumably in his spare time. The Roman method of dressing the ore by pounding and grinding provided a large amount of finely divided but angular quartz, which would be an admirable abrasive for his purpose.

These facts strongly support the suggestion that the Somerset gems were made under similar conditions at the lead mines. Were these and the Welsh examples made by a single individual who was employed successively at the lead and the gold mines, or was gem-engraving a frequent occupation for those connected with mines? It would be interesting to know whether notable quantities of engraved gems have been found at Roman mining centres on the Continent.

C. N. BROMEHEAD.

ROCK SCULPTURES (PLATES I-II)

The problem of distinguishing accidental or natural from intentional engravings on rocks is constantly encountered by archaeologists. At least two serious attempts have been made to prove that marks caused by ice or by the coulter of the plough or by some similar agency were an unknown form of script.¹ They are a vivid illustration of the blindness of the student to the 'common objects of the countryside'. A little more familiarity with rocks and boulders, or at any rate a closer observation of them, would have saved the writers from their unfortunate lapses. However, the object of this note is not to criticize but rather to help; and the accompanying illustration needs little description. It shows a boulder on a large cairn (known as White Cairn), in the parish of Glencairn, Dumfriesshire. It bears fresh, unweathered marks, obviously made by the coulter of a plough. The cairn, though regarded as a 'long' one (*i.e.* prehistoric) by the Royal Commission is, in my opinion, merely a collection of stones picked from the field. It is still forming, as the lighter-coloured piles of 'recent accessions' proves. In the illustration (PLATE I) the white roll consists of 6-inch maps, and is 16 inches long.

Other marks may be caused by differential erosion. Prolonged

¹ 'Early scribed rocks of the Isle of Man', by the Rev. Canon Quine. *Camb. Ant. Soc.* 1922, xxiv, 84-94.

'The origin of the Ogam alphabet', by F. C. Diack. *Scottish Gaelic Studies*, 1931, iii, 86-91.

ANTIQUITY

exposure to rain and wind cause the softer portions of a rock to disappear more quickly than the harder ones. On a large scale this may be seen at the Devil's Arrows, the Queen Stone (Herefordshire) and in many other standing stones. The marks are seen to cease abruptly when the unexposed buried portion is revealed.

Cup-marks are caused both by man and nature, and often it is quite impossible to say which. PLATE II shows some that occur on one of the stones forming the circle called the Twelve Apostles, near Dumfries. These are agreed to be of natural origin, and occur also on some of the rocks of the district. Something similar seems still to be made by snails on the carboniferous limestone rocks of Brean Down.² Many alleged artificial markings are simply the casts left by fossils.

Those who wish to see good examples of genuine rock-sculptures should inspect those in the north of England and in Scotland (Rombald's Moor near Ilkley, Dod Law and so on).
O.G.S.C.

GREEK SHORTHAND

A problem in deciphering certain inscribed wooden tablets of the third century A.D. in the Department of Manuscripts in the British Museum, which had baffled all attempts at a solution, has now been solved through material which has also found its way to the Department and has provided a translation. An interesting article on the key to the script was printed in *The Times* 18 October (p. 7), from which we have taken the following notes :—

‘ In 1887 the Department of Manuscripts in the British Museum acquired nine wax-coated wooden tablets of the third century A.D., inscribed with what was at once recognized not only as a Greek shorthand but as the work of a pupil ; the symbols were repeated in series, obviously for practice. Many attempts were made to decipher these and other surviving examples. But the clue remained hidden for nearly 40 years, in spite of the fact that Professor Wessely, of Vienna, had already in 1895 established certain basic principles of the system—discoveries which have recently been extended by Professor Mentz, of Königsberg. It began to look as if full interpretation was impossible. Then, in 1924, the British Museum purchased two third-century papyrus volumes which supplied the much-needed key to the problem.

² *Proc. Somerset Arch. Soc.*, 1912, LVII, 26 (plate 3).

PLATE I.



FLUCHLARG, WHITE CAIRN, GLENCAIRN, DUMFRIESSHIRE (See p. 463)
(The roll of maps is 16 inches long)
Ph. O. G. S. Crawford

PLATE II



NATURAL CUP-MARKS ON STONE, 'TWELVE APOSTLES' IN CIRCLE, NEAR DUMERIES (See p. 101)
Ph. O. G. S. Crawford

NOTES AND NEWS

‘ These papyri contained by a happy chance the identical series of signs that appeared on the waxed tablets. They also contained their translation in longhand. In a volume to be published by the Egypt Exploration Society Mr H. J. M. Milne, of the Department of Manuscripts, has edited both sets of material, and it will now be possible for the first time to see the whole system as it actually worked.

‘ The material published by Wessely in 1895 consisted of the first leaf of a shorthand primer, or Syllabary, with fragments of others. This elementary course can now be gauged to a fuller extent from a papyrus in the possession of the Egypt Exploration Society, which also comes into Mr Milne’s purview. The Museum material carries the course on to its second stage—the so-called Κομენტάριον, or Commentary. The possession of such a complete conspectus of Greek shorthand is of immense value, since no reconstruction from a stenographic inscription, however ingenious, could hope to offer such certain conclusions. It is of greater interest in that we also know the terms under which, in the second century, aspiring clerks were able to acquire the art of shorthand writing.

‘ Among the Oxyrhynchus papyri (P. Oxy. 724) are the articles of apprenticeship of a slave to a shorthand writer (σημειογράφος). The terms are sufficiently entertaining. The slave, Chaerammon, is to study for two years “ the signs which your son Dionysius knows ” (the arrangement is made with Dionysius’s father) for a fee of 120 drachmae. Of this sum 40 drachmae have been paid in advance ; 40 will be due “ when the boy has mastered the Commentary ” ; and the final instalment is postponed until he “ writes fluently and reads faultlessly ”. There can be little doubt that the Commentary referred to is that which the Museum papyri contain, or that the waxed tablets are the exercise books of a later Chaerammon ’.

HISTORY FILMS*

The use of Films for the purpose of presenting historical events was demonstrated at the International Geographical Congress held at Warsaw in August–September last, when the Editor of the *Canadian Geographical Journal*, Mr Lawrence J. Burpee, and Major G. L. P. Grant-Suttie gave a lecture on the Discovery of Canada. The lecture was illustrated with a motion picture in the form of an Animated Map designed by Mr Burpee and prepared by the Canadian Government

* See ANTIQUITY, June 1934, p. 207.

ANTIQUITY

Motion Picture Bureau. The following description of the film is taken from the *Canadian Geographical Journal* for August 1934.

‘ The screen presents at the beginning merely a map of the country in faint dotted lines. On this outline is gradually built up the results of the discoveries of the different explorers.

‘ Starting with the voyages of the Northmen to the Atlantic coast, a little ship travels across the ocean, and as it touches Labrador a bit of the coast appears on the map with the name Helluland ; the ship sails south and Markland is added to the map, and then Vinland. Then John Cabot sails west from Bristol, and makes his contribution to the exploration of the Atlantic coast. Jacques Cartier follows, and as he enters the Gulf of St. Lawrence, a “ close-up ” is thrown on the screen and the explorer’s course is given in details around the gulf from the north shore to the Magdalens, Prince Edward Island, Chaleur Bay, Gaspé, Anticosti, and so home again by way of the Strait of Belle Isle. In a similar way the St. Lawrence is added to the map, and the Great Lakes, Hudson Bay, the Pacific coast, the vast interior, and the Arctic coast and islands. So the story of the exploration of Canada is told on the screen, the appearance of each explorer being followed by a brief but sufficiently descriptive title. This novel application of the mechanism of “ Mickey Mouse ” to the interpretation of maps and the history of geographical discovery has already attracted a good deal of attention among educationalists ’.

Recent Events

The Editor is not always able to verify information taken from the daily press and other sources and cannot therefore assume responsibility for it.

Dr Falkenstein of Munich University has been studying the early pictographic scripts of Mesopotamia—the oldest writings in the world. It is still not possible to translate them; but his researches have enabled him to discover the general sense of certain combinations of symbols. Thus numbers are represented by stabs made with the blunt end of the reed stylus, and indicate two systems of numeration—a decimal and a duodecimal. Many of the tablets represent receipts or bills for quantities of corn or other merchandize. Scholars will look forward eagerly to the publication of Dr Falkenstein's book in 1935.



Dr Heinrich is working on the definitive publication of the excavations he has been directing at Uruk (Erech) on behalf of the German Scientific Relief Organization (*Notgemeinschaft der Deutschen Wissenschaft*). The results obtained there during seven seasons rank with Ur and Jemdet-Nasr in importance for the early history of Mesopotamia. Some of the objects obtained are exhibited in a room in the new wing of the Near Eastern Department (Berlin Museum). This wing was opened in 1934 and carries a step further the great plan of its Director, Dr Andrae, whose perseverance and technical skill must excite universal admiration. A feature of this new wing is the ingenious method of lighting the objects in wall-cases by natural light reflected from mirrors. Another is the reconstruction of a row of round pillars encrusted with mosaics, belonging to the court-wall of the Eanna-temple at Uruk.



The English Place-Name Society has published as its eleventh volume a survey of the place-names of Surrey. The next survey

ANTIQUITY

will be for Essex, for which much unpublished material was collected by Dr Reaney before the Society was established. Two volumes for this county will be needed. The membership of the Society is now over 800 and indicates the interest taken in this particular subject.



The excavations begun for discovering the sanctuary of the Argive Hera at the mouth of the river Sele in Lucania—according to Strabo a temple founded by the Argonauts—have already led to interesting results. Dr Paola Zancani and Dr Umberto Zanotti-Bianco report finding a large Doric temple about 51 ft. by 118 ft. and dating from c. 500 B.C. Only the foundation walls remain but important fragments of sculptured work have been recovered. One metope represents Herakles armed with club carrying off the Delphic tripod. A number of votive heads and terracotta statuettes have also been found. (*The Times*, 2 August 1934, p. 9).



The fossilized remains of two mososaurs ('sea-serpents') have been placed in the National Museum at Ottawa. (*The Times*, 22 August, p. 13). They were excavated from clay-beds in southern Manitoba, where they are estimated to have 'lain buried for 60 million years'! The mososaur moved by sudden and quick lateral movements. Speaking of aquatic animals one may add that a film has just been shown of the still unidentified inhabitant of Loch Ness. Eminent zoologists and professors of Natural History were among the invited guests and it was their general opinion from the movements and manner of swimming revealed by the film that the creature is 'in all probability a member of the seal family, possibly a grey seal' (*The Times*, 6 October, p. 10).



A Teutonic cemetery has been unearthed at Szentes, in Hungary, which appears to have been the burial-place of warriors in the 3rd or 4th century. A large number of weapons were found. (*The Times*, 25 August, p. 13).

NOTES AND NEWS

Reports of the progress made at Maiden Castle under the direction of Dr R. E. Mortimer Wheeler have been published in *The Times* of 1 August, p. 9; 10 August, p. 13; 25 August, p. 7; 7 September, p. 14; 17 September, p. 8.



Mr Jon Stefansson has communicated to *The Times* (27 August, p. 13) that a gold coin, and 26 silver ones, all of the time of Nero, have been found in the floor of a house at Ginderup, North Jutland. He suggests that it was a hoard of a Danish Viking which points to the relation between Scandinavia and the Roman Empire being very much earlier than hitherto believed.



The excavation of Meare Lake Village, Somerset, which has now been conducted by Dr A. Bulleid and Mr St. George Gray for over twenty years, was resumed in August. Reports of the finds are given in *The Times* 28 August, p. 13, and 12 September, p. 7.



Professor V. Gordon Childe has been investigating the fort on Finavon Hill, which commands the Aberdeen-Forfar road at the entrance to Strathmore. It was a fort of great strength, with rampart over 20 feet thick and once rising to over 20 feet on the outside. Masonry to a height of 12 feet still remains. None of the finds dates the fort precisely but the balance of probabilities favours pre-Roman rather than post-Roman. (*The Times*, 30 August, p. 9).



Further details of the discoveries made by Mr Alexander Keiller at West Kennet Avenue, Avebury (see *ANTIQUITY*, September 1934, p. 344) are reported in *The Times*, 4 September, p. 6, and it is hinted that the site may be given to the Nation.



The King of Rumania is giving personal interest to the excavation of the Roman amphitheatre at Sarmisegetusa, in the Hatseg Valley, Transylvania. The site has for some years been under the care of

ANTIQUITY

Professor Daicovici, of Cluj University. The city was founded by the Emperor Trajan in 106 and became the capital of Dacia Felix. (*The Times*, 25 September, p. 17).



The exhibit of an Ivicene dog, said to be the oldest breed of dog in the world, proved a great attraction at the annual show of the Buxton and District Canine Association held in October. 'Pedro' was brought from Majorca, the home of the breed, five years ago and is believed to be the only Ivicene in England. The Ivicene is the greyhound of Ibiza, one of the Balearic Islands, and an illustration (page 416, plate 10) was included with the plates accompanying the very interesting article on Dogs by Dr Hilzheimer in *ANTIQUITY*, December, 1932.



Interesting features have been found in the course of excavating a long barrow called Giant's Hills, at Skendleby, near Spilsbury (Lincs.), which has been undertaken by Mr C. W. Phillips and Mr A. H. A. Hogg. The east end was supported by a revetment of trunks of trees split into halves, and the holes into which the balks were placed can still be traced. There is evidence of Bronze Age and Iron Age settlements present. Human remains indicate the burial of several persons. (*The Times*, 1 September, p. 8).



'Mummy wheat' is again to the fore, and one or two absurd statements as to germination have been made. Sir Wallis Budge has intimated (*The Times*, 6 September, p. 13) his willingness to present grains of ancient-Egyptian wheat to scientists to test, so that his reiterated opinion that such wheat is incapable of germination may be supported. His letter was followed by others, including a very informative one by Mr A. B. Bradley (2 October, p. 10) giving results of tests as to the vitality of wheat grains which he and Mr R. Whympers carried out in 1910. Under the most favourable conditions of storage and treatment the vitality of 'mummy wheat' is considered as about 50 years.

NOTES AND NEWS

Excavations at Breiddin Hill camp, Montgomeryshire, have been continued this season under the direction of Mr B. H. St. J. O'Neil of H.M. Office of Works. Attention was given to the main entrance and it was found possible to plan the whole. There seems no doubt that the gateway is pre-Roman. Three phases of occupation are shown. Details are given in *The Times*, 31 August, p. 13.



A full report of the work continued at the Viking settlement of Jarlshof (see *ANTIQUITY*, VI, 84 and VII, 484), Sumburgh Head, Shetland, conducted by Mr A. O. Curle for H.M. Office of Works, is given in *The Times*, 10 September, p. 9.



Remains of a primitive copper-smelting industry have been found near Temba Bulach in the Kizil Kum desert, by a prospecting expedition organized by the Soviet Academy of Science (*Monthly Review*, issued by the Moscow Narodny Bank, London, September, 1934 [VII, no. 9] 25).



An American professor of psychology is bringing up his child in close association with a baby chimpanzee of the same age. They are being kept as far as possible under like conditions and their reactions and growth of intelligence observed. At present the chimpanzee is ahead (*Berliner Tageblatt*, 2 September).



Persistent rumours have reached England of a linear earthwork called by various names—the Dane's Cast, the Black Pig's Race, the Worm Ditch—and said to run across Ireland from sea to sea. No continuous line of earthwork ever crossed the country; there are merely a certain number of disjointed fragments. We hope to publish an account of these remains at a later date.

Recent Books and Articles

This list is not exhaustive but may be found convenient as a record of papers on subjects which are within the scope of ANTIQUITY. Books are occasionally included.

A hoard of late Roman coins from [Sharaoh Field, Nobottle] Northamptonshire; its parallels and significance, by B. H. St. J. O'Neil. *Archaeological Journal* 1933, xc, 282-305. [Distribution-map of Theodosian coin-hoards in Britain].

Prehistoric Britain in 1933, by Jacquetta Hawkes and Christopher Hawkes. *Ib. id.* 315-338.

This 'review of periodical publications' differs from the one published quarterly in *The Antiquaries Journal* by being classified under subject-heads; these are chronological for the most part, with occasional useful exceptions (*e.g.* Photography, Megaliths, Beakers, etc.). By undertaking this review the compilers have added several points to the rapidly mounting score of the *Archaeological Journal*.

Monastic paving-tiles, with special reference to tiles discovered at Shulbrede Priory, Lynchmere, by Lord Ponsonby of Shulbrede and the hon. Matthew Ponsonby. *Sussex Arch. Collections*, 1934, LXXV, 19-64.

An excellent and much needed account, with illustrations and a full (but slackly composed) bibliography.

The Chichester entrenchments, by J. P. Williams-Freeman, M.D. *Ib. id.* 65-106.

A masterly account of these puzzling earthworks, based on field-work.

The distribution of sheep in Sussex in the early fourteenth century, by R. A. Pelham. *Ib. id.* 129-35.

A short, but most valuable and suggestive study in economic historical geography. The Adur separates the black-faced poll-sheep of East Sussex from the white-faced horned sheep west of it, the former representing the original stock of the South Downs. The heavy loam soil covering the chalk west of the Arun would have produced woodlands in prehistoric and medieval times, and thus been unsuitable for sheep-rearing. Statistics prove that, in the early 14th century East Sussex produced far more sheep. 'The relatively large numbers of sheep in the corn-growing parishes [as compared with those which possessed down-pasture] draw attention to another interesting point, viz. that large stretches of open downland were not essential for sheep-farming in the Middle Ages'. This contrast between east and west goes back to neolithic times. East Sussex has far more long barrows than West Sussex.

NOTES AND NEWS

A late Bronze Age farm and a Neolithic pit-dwelling on New Barn Down, Clapham, near Worthing; excavation report prepared on behalf of the Worthing Archaeological Society by Dr E. Cecil Curwen. *Ib. id.* 137-170.

A characteristically thorough and lucid report on a so far unique site. Except for some Saxon barrows and the neolithic pit the site is unmixed with confusing relics of other periods. It consists of a farm with road leading up to it through contemporary arable fields (evidenced by lynchets). We could have done without plate II, but have nothing but the highest praise for Mr Gurd's admirable plans and drawings.

Sussex barrows, by L. V. Grinsell. *Ib. id.* 216-275.

A fully documented account with statistical tables that will become the classic article on the subject.

The origin of the West Saxon Kingdom; a lecture delivered on July 17, 1934, at Wilton House, by G. M. Young, in aid of the Wiltshire branch of the Council for the Preservation of Rural England. Oxford University Press, price 2s. 1934.

An interesting essay, full of suggestive ideas; but sometimes passing onto debatable ground.

Maps illustrating the Viking invasions of England, by T. D. Kendrick, M.A. *Saga-book of the Viking Society*, 1934, XI, 61-70.

It is impossible to imagine anything more useful to those, whether teachers or lecturers, 'who want to illustrate a popular account of the Viking invasions of this country'. The five maps with the accompanying few lines of text give all that most of us need to know about the Danish raids.

The excavation of a hut-group at Pant-y-Saer in the parish of Llanfair-mathafarn-eithaf, Anglesey, by C. W. Phillips. *Arch. Cambr.*, June 1934, LXXXIX, 1-36.

A Dark Ages site, dated by a silver penannular brooch, and yielding also potsherds, of a kind that only the most careful methods of excavation would detect. The plan of the group is a fine piece of work. A feature of the article is Dr F. S. Wallis's 'Report on the heavy minerals contained in the coarse Pant-y-Saer pottery'.

Excavations at Titterstone Clee Hill camp, Shropshire, 1932, by B. H. St. J. O'Neil. *Ib. id.* 83-111.

Excellent 'structural finds', but small objects unfortunately absent.

Caer y Twr, a hill-fort on Holy Island, Anglesey, by Willoughby Gardner. *Ib. id.* 156-173.

Accompanied as always by Dr Willoughby Gardner's admirable plans and sections.

ANTIQUITY

Report on the excavations at Hembury Fort, by Dorothy M. Liddell. *Proc. Devon Arch. Exploration Society* [1932, I, part 4].

A valuable report on this very important undertaking. (The off-prints should have volume and year printed on cover). Miss Liddell informs us that this season 'an outer neolithic ditch across the east Iron Age entrance' has been found, about 160 yards from the previous neolithic ditch.

Excavations in Whitehawk neolithic camp, Brighton, 1932-3, by E. Cecil Curwen. *Ant. Journ.*, April 1934, XIV, 99-133.

An important supplementary dig; see also *Sussex Arch. Collns.*, 1930, LXXI, 57-96 and *ANTIQUITY* 1933, VII, 476.

The National Plans (the ten-foot, five-foot, twentyfive-inch and six-inch scales). Prof. Papers, new series no. 16, of the Ordnance Survey. By Brigadier H. St. J. L. Winterbotham, C.M.G., D.S.O., A.D.C., H. M. Stationery Office, 1934. pp. 107, appendix and 21 plates with frontispiece. 4s 6d.

In this volume, crammed full of facts, the Director-General describes the methods and processes of the Ordnance Survey, bringing the old matter up to date in so far as the maps on large scales are in question. There are included many interesting details on matters not hitherto published, which have sometimes puzzled users of this wonderful series of sheets. It seems a pity that the numerous quotations, doubtless from official documents in general, have no references or dates. The volume includes four pages and three admirable plates devoted to antiquities; but the treatment is necessarily brief. A chronological summary should prove valuable to all in any wise interested in this great National Survey, which now more than ever calls for public support. The illustrations are excellent and the cost very reasonable. G.T.M.

Survivals of Paganism in Anglo-Saxon England, by Wilfrid Bonser. *Trans. Birmingham Arch. Soc.* 1934, LVI, 37-70.

An early mesolithic site at Broxbourne, sealed under boreal peat, by S. Hazzledine Warren, J. G. D. Clark, H. and M. E. Godwin, and W. A. Macfadyen. *Journ. R. Anthropological Inst.* 1934, LXIV, 101-128.

The monument of Tin Hinan in the Ahaggar, by E. F. Gautier. *Geographical Review* [American Geographical Society], July 1934, 439-43.

A somewhat vague account of a most interesting tomb.

Guernsey megaliths; their secrets revealed by night, by Florence Ayscough: notes based on a paper delivered before the Congress of pre- and protohistoric sciences at King's College, London, August

NOTES AND NEWS

1932. Reprinted from *Report and Transactions of La Société Guernesise*, 1933.

The point of this paper is that, by photographing sculptured stones with a strong side-light surface irregularities are revealed by their shadows. The method has long been familiar to archaeologists, and is used in museums for photographing seal-impressions and bas-reliefs. It is the same principle as that used in air-photography to reveal low banks and mounds ('shadow-sites'). The author publishes photographs of the well-known Guernsey statue-menhirs (dolmen idols). Her claims would have received more attention if her article had been easier to follow and the photographs technically better; one (plate IV, 1) is out of focus, another (plate II, 2) is badly fogged, and so on. But the method is sound enough, and might with advantage be applied to, for example, the inscribed stones of the Celtic west. Only a good modern camera is essential, and the skill to use it.

Excavations at the Wady al-Mughara, Palestine, 1932-3, by D. A. E. Garrod. *Bull. Amer. School of Preh. Research*, May 1934, number 10, 7-11.

The oldest complete skeletons of Man, by Theodore D. McCown. *Ib. id.* 13-19.

Archaeological reconnaissance in Yugoslavia: American expedition, season of 1933, preliminary report, by Vladimir J. Fewkes. *Ib. id.* 29-62 (with selected bibliography).

Further evidence that this most important, but hitherto neglected key-region, is beginning to attract the attention of serious and competent archaeologists. (See also *ANTIQUITY* 1933, VII, 229).

The prehistoric temple of stratum IX at Tepe Gawra, by E. Bartow Muller and Charles Bache. *Bull. Amer. School of Oriental Research*, April 1934, number 54, 13-18.

Carries with it a plan of the temple and of the stratum or level (no. 9) in which it occurs (why no scales given?), together with an excellent 'suggested restoration' (fig. 14). The discovery was described in the *Bulletin*, no. 49, p. 10.

Studies in the significance of the Irish Stone Age: the Campignian question, by C. Blake Whelan. *Proceedings of the Royal Irish Academy*, XLII, section C, no. 7, 1934.

Reports on the excavation of a flint chipping-floor accompanied by hearths in the townland of Ballynagard, Rathlin Island. The bulk of the flints show a 'Campignian' facies, but they include a broken axe with ground cutting edge. In the immediate proximity of one of the hearths a rim-piece of Windmill Hill ware was found. The 'Campignian' industry at this site is thus shown to belong to the Neolithic period.

J.G.D.C.

Reviews

THE DAWN OF CONSCIENCE. By JAMES HENRY BREASTED. *New York and London : Charles Scribner's Sons, 1933. pp. xxvi, 431 and 19 plates. 3 dollars.*

Professor Breasted has attempted a mightier task than he imagines and than the readers of his title would suppose. An archaeologist is concerned strictly with material objects, and Professor Breasted is here avowedly examining what his research provides in the guise of a philosopher, or, as he would prefer it, as a speculator on the origin of moral judgments. The result is a splendid summary of all the relevant documents that illustrate the slow emergence of *Homo Sapiens* from the age-long period of supremacy of *Homo Faber*. As the author points out, man became the first weapon-making creature, and for perhaps a million years has been perfecting those weapons ; but it is less than five thousand years since men began to feel the power of conscience to such a degree that it became a potent *social* force. Nor are those periods exclusive of each other for, as the author says, in the valley of the Somme can be found side by side fragments of his first and of his latest weapons. But it is with that five thousand years that the Professor is concerned in this book, and his careful accumulation of evidence and his searching analysis of ancient moralizing gives us for the first time a chronological study of the development of moral ideas in Egypt. He has, in effect, written what should have been the earlier chapters of Hobhouse and Westermarck.

It is in the Valley of the Nile that the author sees the first breeding ground of morality. For here was what he calls a 'social laboratory' which, exempt from the rigours of the European Ice Age, was gradually isolated and insulated by the desiccation of surrounding regions. Into this oasis came those hunters who were to become the sedentary Egyptians, and from their undisturbed development of society were to emerge the first speculations on spiritual values. Between 5000 and 3500 B.C. arose the first great civilized state of the world and from its acts and its literature we can now study its development of ideas.

The first document is perhaps the most interesting. In a text of a mystery play written at Memphis in the middle of the 4th millennium, which is a priestly study of the origins of the world, are revealed a number of judgments based on customs which had not yet become a system of morals. It contains, says Prof. Breasted, 'the oldest thoughts of men that have anywhere come down to us in written form'. In the Memphite Drama we find the fundamental assumption that mind or thought is the source of all, a primitive idealism expressed in the words 'It came to pass that heart and tongue gained the power over every member'—in other words that speech and thought controlled action. Moral behaviour is outlined as 'doing that which is loved' and immoral behaviour as doing 'that which is hated', the simplest statement of social or private morality possible. Here at the start is the social background and social sanction of action. It remains to be seen whether the author, or indeed anyone else, can show that there has ever since been any advance from this basis. In the background, not really fitting into this Memphite scheme of morals, the priests introduced the Omnipotent Sun-God, and it is here at the very outset that Professor Breasted fails to detect the *non sequitur* in the priestly

REVIEWS

philosophy. If morals were dependent on social reactions, there is no place for theological concepts. Egypt may well be said to have been the first offender against logic as well as the first to speculate on morals. The intrusion of a deity into a social background was a complication that was not needed to make the moral speculations complete. Ptah of Memphis took over the attributes of the sun and was attached loosely to the embryo moral system. Prof. Breasted fails to note the intrusion, as an intrusion.

With the discovery of morals and the addition of a controlling god the Egyptians next had to face the problem of death. Here Professor Breasted is at his best, and his accumulation of material is of the highest value. So far death and a possible after-life were not linked in any way to moral systems. The Egyptians of the early Dynasties faced the paradox of death with nothing but material weapons. The Pyramids, themselves in a sense solar emblems pointed at the heavens, represent 'the culmination of the belief in *material equipment*' as completely efficacious in securing felicity for the dead. 'They represent an attempt to conquer physical forces by physical force, perhaps the most imposing attempt in the world', the final effort of a struggle 'which had been going on for a million years'. But now it was the disciplined forces of a whole nation instead of an isolated hunter which were brought into play. The Pyramid Texts constitute an attempt to convey felicity to the dead king by every agency of ancient lore and wisdom. But so far the attempts of the Egyptians to obtain eternal life were concentrated on their king. Of the commoner we hear nothing, for, almost as soon as Egypt had become a social entity, theocracy and kingship got control.

Professor Breasted describes the gradual growth of Egyptian religion, the compromise with Osiris, and the steady growth of Solar cults. The next literary contribution to moral study which he examines is the work known as the Maxims of Ptahhotep, which 'furnish us with the earliest formulation of right conduct to be found in any literature'. Ptahhotep summarizes the moral outlook of his age. His Maxims are as typically Oriental in form and outlook as the Koran, though mainly secular, shrewd and almost Machiavellian. But still morals are entirely social and the link with theology or religion is not yet established. The important thing that has now emerged is a consideration of Conduct, with moral implications. The term *Maat* now achieves the meaning of 'moral conduct' and so later of 'Right' or, more abstractly, 'Justice'. *Maat* is not found in the Memphite Drama. A vocabulary of terms for moral philosophy is being built up.

Next comes a period of disillusionment. The mighty attempt to defeat material decay by material survival, illustrated by the Pyramids, has failed. Political changes had even left the Pyramids abandoned and partly in a state of dilapidation. 'There they stretched like a line of silent outposts on the frontiers of death'. Their failure was evident. And so we now get, illustrative of the age, the 'Song of the Harp player'—

'Put song and music before thee
behind thee all evil things,
and remember thou only joy,
till comes that day of mooring
at the land that loveth silence'.

Here at last is the failure of theology and maxims and embryo moralizing. The Egyptians had reached the sceptical age. The reason was not inherent in their speculation but was due to a general political breakdown which had made life intolerable. Again it is society which is making morals. An administrative order had perished and with it man's hope of good order and government. Then came an age of prophets and

ANTIQUITY

messianism. The 12th Dynasty sees the restoration of social order and the emergence once more of moral speculation. Slowly the concept of abstract social justice appears and society is conceived of as more than the close corporation of princes and priests. But the 'Tale of the Eloquent Peasant' is eloquent more for what it tells us of the abuses of princes than of the amelioration of the conditions of the serfs. The picture it draws shows with what bitter slowness Egyptian ideas of abstract justice and morality were in fact developing. Here, I think, Professor Breasted fails us, for he seems unaware of the appalling delay in moral development which the now fully civilized Egyptians exhibited. For Egypt now had a cast-iron social order which 'eloquent peasants' were almost powerless to change. The 'Tale' of the peasant is no more than a political squib to show how the princes and potentates were caring for their subjects. One wonders how long Greeks would have endured the social order revealed in this tragic tale.

Slowly we see the growth of sacerdotalism and its assistant magic. Gradually abstract moralizing becomes a prerogative of the theocracy. The priesthood was in the saddle. Then in the time of Thutmose III comes the great imperial expansion of Egypt, and with it the development, natural as a consequence of world power, of Monotheism. World-relations produced universalism. From this came the new religion of Ikhnaton, the social and religious revolution that changed the whole course of Egyptian history and then the mysterious suppression of the revolution by an all-powerful theocracy. The fact that no man knows the way in which Aton worship and Ikhnaton were disposed of is itself testimony to the immense power of the vested interests which the revolution unseated. Sacerdotalism is paramount again, and from now on Egypt is on the down grade as far as speculation and freedom are concerned.

Professor Breasted has written a fine and stimulating book, which will be an example for speculative archaeologists and should be in the hands of every student of moral philosophy, particularly of those who are interested in the genesis of morals. For here is all the first hand material clearly set out.

The debt of Hebrew literature is so great to preceding Egyptian that it almost seems that the bulk of the Old Testament is derivative. Prof. Breasted makes a very strong point of the fact that the Hebrew writers distilled the essence of nearly two thousand years of Egyptian speculation into their writings. His parallel texts of Amenemope and the Book of Proverbs shows how profound in some cases the debt to Egypt was. Moses, whose very name is Egyptian, he shows to have been a leader fully educated in Egyptian customs, who persuaded the Hebrews to cast out their local 'ēls', or deities, and adopt Yahveh, a more important volcano-god in Sinai, as their sole god. The occasion, Professor Breasted thinks, was an actual eruption in Sinai followed by a tidal wave. In enjoining circumcision on his followers Moses was but taking over an Egyptian rite practised for three thousand years before. The Egyptian origin of the 104th Psalm is also made perfectly clear.

There is no dull page in this book; a little over-emphasis and repetition here and there will not deter the reader. He will finish it with the feeling that the brave beginnings of speculation in Egypt were soon stifled, that a direct association of moral behaviour with religious belief was never achieved, and that from Egypt there could never have sprung the main growth of European philosophy. Between Greece and Egypt there is an unbridgeable gulf. The moral philosopher will gather an immense quantity of material, yet feel at the end that there is here no proof that morals can be conceived of as having any genesis or sanction outside society. The sociologist will consider with sadness that the story of speculation in Egypt is a story which has subsequently been repeated in

REVIEWS

every detail at various periods. There has been no steady advance from where the Egyptians left off. On the contrary endless attempts have been made, beginning all over again from the outlook of the Memphite Drama. None of them seems to have been very successful.

STANLEY CASSON

CATO THE CENSOR ON FARMING. *Translated by* ERNEST BREHAUT. (Records of Civilization : Sources and Studies, vol. xvii). *New York : Columbia University Press ; London : Oxford University Press, 1933. pp. XLVI, 156, with 1 plate and 6 line drawings. 18s 6d.*

The treatise *De Agri Cultura* of the elder Cato takes no high place as a work of literature, but it is a document of the very greatest importance for the economic history of Republican Rome. Written in the first half of the second century B.C., by one who was himself a farmer of the old school, as a practical guide for the gentleman-agriculturalist or his foreman, it represents the transition from the old Italian agriculture, devoted mainly to the production of cereals and based on a system of small holdings in the hands of free peasants, to the new order in which the vine and the olive were supplanting grain-crops and the peasant proprietors were giving place to absentee landlords, working large estates by slave labour. The style of the work is scrappy and disconnected and most of it is nothing more than rough notes, but in its way it provides a fairly complete calendar of the farmer's year, and at the same time gives valuable sidelights on other matters—on the building of the farm and its equipment, with special reference to oil- and wine-presses, on the supply of labour, partly by slaves, partly (at busy seasons) by freemen working under contract, on the condition of slaves, their management and feeding, on the old religion of rural Italy and its relation to agriculture, and on the primitive medicine which finds in cabbage a specific against all ills from gout to deafness.

Mr Brehaut has carried out the work of translation well : if he has given his version rather more literary form than the original possesses that at any rate will make the English reader more comfortable. There are one or two slips, but only in minor matters. The text is supplemented by an ample series of scholarly footnotes, in which some of its difficulties and obscurities are cleared up and parallels are adduced from ancient authorities and modern practice and by a careful introduction, in which Mr Brehaut lays emphasis on the adaptation of the practice of the small peasant grain-farmer to the needs of the large-scale wine- and olive-farm worked by slave labour.

The reader who desires an introduction to ancient agriculture can find nothing better than Cato's handbook as presented and interpreted by Mr Brehaut. It is a pity that the price is unreasonably high ; though the book is handsomely produced, the illustrations are neither numerous nor elaborate.

C. J. FORDYCE.

ENQUIRIES INTO RELIGION AND CULTURE. *By* CHRISTOPHER DAWSON. *London and New York : Sheed & Ward, 1933. pp. xi, 347. 8s 6d.*

This is a sheaf of essays on a wide range of subjects, unified by an Idealist and, in details, a specifically Roman Catholic view of history. The chapter-headings will give the prospective reader some idea of what particular problems he will find discussed : the New Leviathan (on 'mass-civilisation') ; the significance of Bolshevism ; the world crisis and the English tradition ; the passing of industrialism ; cycles of civilization ; religion and the life of civilization ; civilization and morals ; the mystery of China ; rationalism and intellectualism ; Islamic mysticism ; spiritual intuition in Christian

ANTIQUITY

philosophy ; St. Augustine and his age ; Christianity and sex ; religion and life ; the nature and destiny of man.

As will be seen, much of the book falls outside the scope of ANTIQUITY and I will confine myself therefore to one or two questions of principle.

The book reads well and the philosophy running all the way through makes it possible to read its chapters consecutively without that feeling of jarring which is inflicted by many collections of essays dug out from study-table drawers and strung together haphazard. Unlike many of the intelligentsia whom he criticizes, Dawson does know where he stands and he can express his standpoint with clearness and learning, qualities which are not always twin-brothers.

On p. ix Dawson says : ' The trained theologian may often fail to recognise the social and economic elements in religious changes '. But this protest against what he calls ' a false spiritualism ' does not prevent him from being as agile as his fellow Idealists in their happy lands of angels, gooseberry-bushes, and parsley-beds. His chapter on ' Religion and the life of Civilisation ' (in which the gem is ' behind the hard rational surface of Karl Marx's materialist and socialist interpretation of history there burns the flame of an apocalyptic vision ' ! p. 111) shows this abundantly. Readers of Rhys Carpenter's *The Humanistic Value of Archaeology* (Harvard, 1933) will remember the comment on Langlotz's theory (*Antike*, 1932, VIII, 170-82) that it was the coming of the Oriental cult of Dionysos which ended the Dark Ages of early Greece : ' To me, Dionysos is merely a symbol or symptom of the awakening force. Men have nearly always the kind of religion that they are ready for and that they deserve. In the 8th century B.C. the outside world of Babylon, Assyria, and Egypt where the civilisation of the western world began, had once more touched Ionia and Greece ; and it was this contact which ended her barbarism ' (pp. 54-55). There has been a deal of mystification about both babies and Ideas, and the inadequacy of the Idealist position can best be brought home to the layman by an enquiry into the less well-known periods of history like 8th century Greece ; a discussion of better known periods is apt to be fogged by all sorts of modern influences, ' the glory that was Greece ', the influence of the Christian tradition, to name but two.

To condemn Idealism does not involve abandoning idealism (which is not synonymous with the burning flame of an apocalyptic vision). In his introduction one of Dawson's premises is that Materialists, if consistent, cannot help being materialists—which seems suspiciously like taking advantage of the limitations of language in order to ' prove ' that your opponents, if consistent, are rather sordid folk and if they are not sordid folk are really acting on similar principles to yourself and are therefore inconsistent.

At a time when many people are wanting to know what Marxism is all about, it is unfortunate that a book which is an able exposition of the Idealist position should be so unhelpful in its references to Marxism, in spite of appearances to the contrary. Here in his introduction and his essay on ' The significance of Bolshevism ', so far from getting down to an analysis of the Dialectical Materialism of the Marxists, Dawson does not even define his terms. On p. vii we are told that Marxist philosophy is ' materialistic ' ; on p. 24 we meet the phrase ' dialectical materialist ' in a quotation ; on p. 27 we have a little raillery at ' the Bolshevik philosophy '. But all this gets us no further. How many readers would realize from Dawson's pages what Dialectical Materialism is or even suspect that it is a philosophy distinct from Mechanistic Materialism, the form of Materialism which we have been in the habit of calling simply Materialism without qualification ? As if the Marxists had not demolished Mechanistic Materialism with as much gusto as Dawson likes to demolish it himself !

GEORGE SHORT.

REVIEWS

MEGALITHIC REMAINS IN SOUTH SUMATRA. By Dr A. N. J. TH. à TH. VAN DER HOOP, translated by WILLIAM SHIRLAW. *Zutphen, Holland: W. J. Thieme & Cie* (no date). pp. 191, with 226 plates and 17 maps. [Price not stated; but ascertained to be £1 12s 6d paper, £1 15s 0d cloth bound].

While the existence of megalithic remains in the Indian Archipelago has long been well known, their ethnological and archaeological significance is scarcely, if at all, understood. The possibility of their having been connected, however remotely, with the very similar remains in Europe and the Near East is one that naturally appeals to the European archaeologist, for one is reluctant to believe that two closely similar groups of peculiar phenomena could arise independently on opposite sides of the globe without some common cause or common origin. Before this problem can be solved, and, indeed, before one can fully understand our own megaliths, it is obviously essential that detailed surveys should be made of all areas of megaliths throughout the world, studying and recording every individual monument and every relevant fact bearing upon it.

Dr Van der Hoop's study of the megaliths of South Sumatra is a step in this direction. His work in the field has been as systematic and thorough as his opportunity permitted, short of excavation, and his record is full and clear, and, above all, sumptuously illustrated. He himself is far from claiming that his work is exhaustive, and though he quotes a certain amount of comparative material from neighbouring areas he emphasizes that the prime necessity is the collection of facts in regional surveys, postponing comparisons and generalizations until this has been more widely done. Indeed, he has a good deal of polite scorn and gentle ridicule for the 'Manchester School', which, he argues, presumes to formulate theories as to what might have happened, instead of waiting for the patient and laborious collection of facts, upon which alone useful conclusions can be built up.

The remains which the author classes as megalithic in South Sumatra comprise: 53 images; 20 'lesoengbatoe' (possibly single or multiple mortars); 12 stone troughs; standing stones in at least 8 places; 8 groups of four stones placed in a square or rectangle; 2 stone avenues; at least 20 dolmens; 9 stone cists; 2 terrace graves; cup-marked stones; and 7 miscellaneous objects. The association of these various classes of remains with one another leads the author definitely to conclude that they all belong to one single megalithic culture. While some of these monuments have no counterpart in Europe, others, such as dolmens, standing stones, stone cists, and cup-markings, are old friends, and it would be difficult to think that in origin they had no connexion with the movement that affected so much of northern and western Europe.

After a systematic descriptive catalogue of the individual monuments, arranged topographically, the various classes of remains are considered in turn, both on their own merits and in relation to similar remains elsewhere in the Archipelago. The most important of these are the images, because, if the author is correct in regarding them as an essential part of the culture as a whole, it is from them alone that any clue can be obtained as to the period to which it belongs. Unfortunately these representations of the human figure are not sufficiently accurate portraits to make possible an anthropometric determination of the race which they represent. Nevertheless one important clue is forthcoming as to their date. An image in the Batoegadjah represents a man riding an elephant and carrying strapped on his back a peculiar kettle-drum. Bronze kettle-drums of exactly this type are found distributed in the Archipelago and in South China and Tonkin, in which latter district examples found in a cemetery at Dong-son have been dated to the Han dynasty of China (206 B.C. to A.D. 220); in this instance the date can be narrowed down by associated coins and a sword to the second half of the

ANTIQUITY

first century A.D. Short swords, daggers and bronze plates (armour ?) found at Dong-son also have their counterparts in the images of South Sumatra, while confirmatory evidence is further supplied by various forms of ornament. The question as to whether these kettle-drums originated in the Archipelago or in Indo-China is discussed, and evidence is quoted in favour of the latter district as being the area of origin, though the type continued to be made with variations after its introduction to the islands, as witness a stone mould for casting such a drum found in Bali. A further suggestive point is found in the analysis of certain ancient bronze arm-rings found in South Sumatra, showing an unusually high percentage of lead which closely corresponds with the lead content of the Dong-son type of kettle-drum, but not with that of any of the other later types.

The various purposes of standing stones are discussed, especially in relation to areas where they are still used. In Central Celebes they are sometimes erected in circles at a place of sacrifice. Of special interest to British archaeologists is the view of Heine Geldern (cited by our author) to the effect that 'megalith-building peoples frequently substitute wooden monuments for those of stone, when they find themselves in a region where suitable stone is lacking' (p. 119).

Though dolmens occur elsewhere in the Dutch East Indies, and have been proved to be graves, our author says: 'On no occasion did we find any indication that the dolmens of South Sumatra had been used as a grave'; and again: 'We never came across dolmens in the form of a tomb, as these exist in Besoeki'. The reasons he gives for this conclusion are that the supporting stones are sometimes too low to leave sufficient space beneath the cap-stone; that they frequently resemble the legs of a table rather than the walls of a chamber; occasionally, also, they stand so close together that there is scarcely any space between them. Moreover, one dolmen yielded no trace of interment when excavated.

A few minor points of interest include the following: (1) A monolith near Badzava (apparently not in Sumatra), formerly served to determine the beginning of the period when rice must be sown; when the sun rose above this stone, as seen from the house of the tribal chief, seed-time was considered to have come (p. 115). Comparison is made with Stonehenge. (2) The idea that megalithic monuments are petrified human beings is general in the Archipelago, and comparison is made with the Rollright Stones in Oxfordshire (p. 5). (3) Stone axes in Sumatra are called 'teeth of the lightning' and are preserved as charms against sickness (p. 94). In Europe they are frequently called 'thunder stones' or 'Thor's hammers', and are valued as charms. (4) The orientation of the monuments is in all instances carefully worked out, but does not in the author's opinion warrant any conclusion as to a possible solar cult.

While arguing that the evidence justifies the view that the megalithic culture of South Sumatra dates from the beginning of the Christian era, the author wisely insists that conclusions as to the race or people who introduced it would be premature until far more field-work has been carried out all over the world. Megaliths have a world-wide distribution, and chronologically they range from the neolithic in Western Europe to the present day in Assam and elsewhere (see *ANTIQUITY*, 1929, III, 324-38). Recent views regard them as an expression of a cult of the dead, that is, as evidence of a religious rather than a racial or cultural expansion. It may be that detailed field-work will yet reveal the path by which this idea may have swept across the world like a forest fire, originating from one centre, fanned by the trade winds, spreading in one or more directions, dying out along its track, and blazing out afresh as it advances.

The author's work is thorough, scholarly and discreet. The photographs are very

REVIEWS

fine indeed and are beautifully reproduced. There are no less than 171 of cabinet size and 10 twice as large.

The translation is good on the whole, though there are too many errors in spelling and in idiom. The term 'Ordnance map' has no meaning outside Great Britain, but it is coming to be used to signify a Government map—a compliment that Great Britain must appreciate, though based on a misconception. E. CECIL CURWEN.

A HISTORY OF DELOS. By W. A. LAIDLAW. Oxford: Basil Blackwell, 1933. pp. 308, 8 plates and a plan. 18s.

This monograph falls into line with a number of similar works on Greek islands, many of which are published only in Greece. Delos, however, cannot rank as a mere Greek island, for its history largely reflects the history of Greece and its sanctuary was of international fame. The author has compiled a painstaking study of the whole history of the island and its inhabitants. All such compilations are as necessary as they are dull. Mr Laidlaw has not succeeded in avoiding the essential dullness of his task, nor has he attempted to diminish it by any felicities of style. But this is the only conceivable complaint which can be lodged against a very thorough and useful piece of work.

After a proper investigation of the history and legends that concern the island he outlines the results of excavations and recent research. The bulk of his book is largely given up to a full account of Delos during the Hellenistic and Roman periods, for at those periods the local epigraphical sources are richest. The alternation of Athenian control, autonomy and Roman or Pontic control made Delos for many centuries a place of international fame, not merely from the religious and political points of view but also from the commercial aspect.

The virtual extinction of Delos in 88 B.C. makes it for students of art a place of unusual importance, for that date can serve as a *terminus ante quem* for a very little known period of artistic development. But the author is not much concerned with the artistic finds of Delos. He catalogues the most important, but his seven pages on 'The art of Delos' is a mere appendix, and a rather unsatisfactory one at that. His description of the Nikandra dedication as a 'relic, scarcely sculpture' shows a profound inability to appreciate the strivings of early sculptors. He fails to call attention to the important Cretan figures of the seventh century from Delos; and is uncertain about the date of Archermus.

But the book is useful and will serve historians of the Hellenistic age well. It contains a mass of useful references and well summarized information. The illustrations are, unfortunately, quite useless. Their photographer does not even know the rudiments of archaeological photography. STANLEY CASSON.

THE RENAISSANCE IN EUROPE. By TRENCHARD COX. (London the Treasure-House Series). Methuen, 1933. pp. 180 and 22 plates. 6s.

This is the first of a series of small books which will deal with a period of history and illustrate that period exclusively from the galleries and museums of London. No praise can be too high for such a project.

This volume covers the Renaissance and illustrates almost every phase of Italian art from the Proto-Renaissance to the Late Renaissance by a discussion of material in the National Gallery, the Wallace Collection, the South Kensington Museum and elsewhere. It constitutes the best possible guide to some of the principal art-treasures of London. But it is more than this, indeed Mr Cox has written a short, concise and very scholarly

ANTIQUITY

history of Renaissance art. On every phase he has something important and original to say. He points out at the start that Italian artists were not treated as 'extraordinary beings in whom every kind of eccentricity might be condoned and each turn of temperament forgiven, but as craftsmen under contract'. He goes on to show how sculpture was at first the vehicle which carried the new spirit of the Renaissance, and later handed over the task to painting. He then takes the painters and sculptors in chronological order and discusses their characteristics as exemplified by their works in London. The astonishing wealth of London in works of the High Renaissance is fully illustrated by his discussions. Of the work of Leonardo da Vinci, Botticelli and Michelangelo London can show more than any other city outside Italy. He also writes of Renaissance work in France, Germany and the Netherlands. Of the Flemings he remarks that 'in the matter of technique, they achieved in a night what the painters of Italy had struggled for centuries to attain'. While Van Eyck was achieving an uncanny realism, Uccello was 'initiating the Florentine public into the delights of a rocking-horse world'.

This is from all points of view an admirable book, strongly to be commended to Londoners of all sorts, ages and conditions, to all foreigners and to all artists. Its sale should be deservedly large.

STANLEY CASSON.

LA PRÉHISTOIRE : Conférence faite le 1er mars 1934 pour l'Union Rationaliste. By VAYSON DE PRADENNE. *Paris : Union Rationaliste, 1934.*

This little lecture was delivered by M. Vayson de Pradenne to an educated audience without special knowledge of prehistoric archaeology and represents an interesting essay on the place of the subject in the general field of knowledge. The author, in commenting on the poor press that prehistoric archaeology has generally received, makes the sound point that having defeated clerical opposition archaeologists have now to contend with the ill-concealed scorn of their brother scientists. This he ascribes partly to the natural jealousy of older established sciences, but partly also to the faults of archaeologists themselves, notably an over indulgence of imagination and critical standards that fall too far below those obtaining in kindred subjects.

The faults to which M. de Pradenne draws attention are partly due to the youth of the subject, since where so little is known the gaps are liable to be filled by imagination with disastrous results to the intellectual integrity of workers in the subject. There is, however, another explanation to be found in the social standing of many of the earlier archaeologists, too many of whom were land-owners and (in our own country) priests of the established church, both groups with a vested interest in the maintenance of a certain social order and therefore not only uncritical themselves but intolerant of the critical outlook and of the free range of intellect. This adverse sociological factor still weighs heavily against the unfettered progress of prehistoric archaeology in this country, though its influence is fortunately on the wane.

J.G.D.C.

DIE GRABFUNDE AUS DEM SPANISCHEN WESTGOTENREICH. Band II, Germanische Denkmäler der Völkerwanderungszeit. By HANS ZEISS. (Publication of *Römisch-Germanische Kommission des Archäologischen Instituts des deutschen Reiches*), Berlin and Leipzig, 1934. pp. VIII, 207, with 32 plates. RM. 33.

This is the second volume of an important series of publications, sponsored by the Römisch-Germanische Kommission, which sets out to survey by means of regional studies the complete Migration Period archaeology of the German peoples. Walter

REVIEWS

Veeck came first with his book on the Alamanni and Franks of Württemberg, and the second publication, now under review, is Dr Hans Zeiss's account of the Visigoths of Spain. All those who know this author's work will expect a book conspicuous for its impressive thoroughness, and they most certainly will not be disappointed. It is, indeed, a noble and astonishing survey that well illustrates the archaeological virtues that Dr Zeiss possesses in so high a degree, namely a devotion to order and accuracy, and an extraordinary sensitiveness to the niceties of typological and mechanical development. The plan of each volume is apparently to be the same, which some of us may regret as it is one that seems to lead to a considerable amount of wasteful repetition, since under the separate headings 'Typology of Objects', 'Chronology of Cemeteries', 'Cultural Position of the Finds', we get what very nearly amounts to the same information three times stated. One might suggest that it would have been better to begin with the very fine historical account of the Visigoths (which now comes at the end immediately before the inventory), to have given us next the bibliography of the cemeteries accompanied by a good distribution map showing their positions (this is omitted, for the map on p. 94 cannot be counted a sufficient guide), to have followed this with a single comprehensive typological and chronological study of the material, and to have ended with an adequate summary and conclusions. But there is nothing seriously wrong for those already accustomed to Veeck's book, and, in general, there can only be praise for Dr Zeiss's volume. He shows himself to be a most sagacious observer, refreshingly free from fixed ideas, and very willing to concede that there are Migration Period antiquities earlier than the 7th century. His study of the Late Roman archaeology of Spain is a particularly valuable section of the book, and the attempt to isolate the 'transition' cemeteries is also of much interest. Like everybody else dealing with Migration Period antiquities, Dr Zeiss is almost immediately compelled to obtain his chronology by means of a sort of stylistic and typological dead reckoning, that is distressful reading for those accustomed to deal with material that can be dated by safer methods. He has, however, a real flair for this perilous work and is to be congratulated on the reasonably convincing chronological system he has evolved. One would only want to dispute with him over a very few details, and there is no doubt that we shall all use his book gratefully and admiringly. It is splendidly illustrated with a fine set of plates, nearly all devoted to small personal ornaments of metal. Visigothic archaeology contains very little pottery, no glass at all, and only a few characterless weapons, so that Dr Zeiss's imposing chronological structure is therefore built up on a foundation consisting almost entirely of brooches and buckles. But he has studied these little articles with such painstaking care that we are left with a very considerable respect for his conclusions.

T. D. KENDRICK.

HOMENAGEM A MARTINS SARMENTO : *Miscelânea de Estudos em Honra do Investigador Vimaranes no Centenário do seu Nascimento (1833-1933)*. Publication of the *Sociedade Martins Sarmento*. *Guimarães*, 1933. pp. 480, *illustrated*. 70 escudos (56 francs).

This volume commemorates the centenary of the birth of the Portuguese archaeologist, Martins Sarmento, in 1833. He is everywhere famous as the excavator of Citânia de Briteiros, but the honourable record of his work is perhaps of less importance than the results of the influence he exerted in Portugal, where he was the pioneer of scientific archaeology. A charming introductory essay by Mário Cardozo makes the debt that is

ANTIQUITY

owed to him very plain, and none will say that this centenary volume is not a just tribute to the memory of a great and inspiring scholar. There are no less than 68 contributors, and the field covered by the essays is a wide one, including studies in folklore, literature, and music, in addition to the archaeological topics. The British authors represented are Dr Felix Oswald, who writes in French (why ?) on evidence for the presence of the 8th Legion in Britain, Mr Leeds (Egyptian vitreous beads in Spain and Britain, imported before 1200 B.C.), Dr Prestage (Portugal as a pioneer of Christianity), and Mr Radford, whose admirable essay on the Early Iron Age in southwestern Britain must surely be hailed in all countries as one of the best of this collection of admirable papers. From the Peninsula itself come 30 papers from Portuguese scholars and 13 from Spain, so that the total value of the volume for the archaeology of these two countries is considerable. The 7 German authors have also devoted themselves in the main to problems of the Iberian lands. Dr Kühn writes on the openwork figured buckles from the Visigothic cemeteries, which he connects with Avar archaeology and dates in the 7th century. Dr Zeiss has an article on late Roman pottery, Schulten gives us a study of Segeda, and von Richtofen discusses bee-hive huts in the Peninsula, a particularly fine paper. The late Portuguese scholar, Serpa Pinto, is represented by an article on the stone fort of Sendim, which, even though it was left unrevised, shows how good an archaeologist his country has lost. It is interesting to note that he is the only author in the whole book who gives a line-drawing of a pot as modern archaeologists expect to see it, complete with section. In general, the volume has a few faults, the chief being that it is one of those remarkably irritating books which are enormously heavy and yet of such astonishingly delicate construction that the turning of a single page threatens the whole affair with disruption. Many of the pictures, notably the half-tones, are not good, and it ought to have been possible to have produced a much better-looking volume. For instance, the print could have been larger and the margins narrower with advantage, and the running head might well have been the short title of the article beneath it instead of the uselessly reiterated name of Sarmento. Finally, the list of contents should have been expanded by a 'subject' or 'period' classification of the papers.

T. D. KENDRICK.

ÖLAND UNDER ÄLDRE JÄRNÄLDERN. By MÅRTEN STENBERGER. Publication of *Kungl. Vitterhets Historie och Antikvitets Akademien*, Stockholm, 1933. pp. vii and 306, illustrated. 15 Kr.

Öland is a Baltic island, a narrow strip of land 85 miles in length, lying close in to the southeast coast of Sweden, and this book is an archaeological survey describing its antiquities from the beginning of the pre-Roman Iron Age to the end of the Viking Period. It is a brilliant work, splendidly produced and illustrated, and complete with a full apparatus of inventories, indexes, bibliographies, and distribution maps. There is also a German summary for those who do not read Swedish. The book begins with an account of the burials, which have produced some grave-groups of considerable importance to the British archaeologist, particularly for those who are interested in shield-bosses and weapons. The next section, which is of astonishing wealth and forms the greater part of the book, deals with homestead plans and contains a complete monograph on the 'Kämpagrav' or 'Hunnebed' house-type in its European setting. This is a long rectangular form of dwelling with low walls of stone and earth on which rested the edges of a gabled roof that was further supported by rows of posts inside the house.

REVIEWS

With it is associated a rectangular field-system. Over 300 of these houses occur in the island and the type is believed to be of western origin, no Scandinavian example being earlier than the beginning of the Christian era. The third and final section deals with the camps, of which the most interesting, Ismantorps Borg, must surely rank as one of the chief prehistoric monuments of Sweden. It consists of a ring-wall, enclosing an area about 125 metres in diameter, that has no less than 9 entrances. Inside is a regularly planned system of 88 rectangular houses, an outer ring of 50 being built against the surrounding wall, and an inner group being arranged in 'quarters' that are separated by streets, while in the heart of the town is a central circular structure of unknown significance. This is a very fine book indeed, and a most useful one. It certainly presents archaeologists in this country with a great deal of material that is, I think, new to most of us.

T. D. KENDRICK.

DAS BOOTGRÄBERFELD VON TUNA IN ALSIKE, UPPLAND. By T. J. ARNE. Publication of *Kungl. Vitterhets Historie och Antikvitets Akademien*, Stockholm, 1934. pp. 81 with 16 text figures and 33 plates. 15 Kr.

Tuna is the site of one of the three famous boat-grave cemeteries in the Uppsala neighbourhood of Sweden. It has been known for over 40 years and has been excavated on three occasions. This is the definitive publication of the cemetery, and as it is the work of Dr Arne and is sponsored by the Academy it is almost unnecessary to say that it is just as good as it could possibly be. In fact, it is a worthy companion to the splendid Vendel volume by Stolpe and Arne, and that is the highest praise that any excavation-account of this sort can earn. All but one of the graves belong to the Viking Period proper (800-1050). The exception is grave XIV, which is not likely to be later than A.D. 600 and is therefore the oldest grave in all three cemeteries. It was not, however, a boat-burial, and Dr Arne is of the opinion that the normal burial-custom, inhumation accompanied by sacrificed animals in a buried boat, was not known in Sweden before the middle of the 7th century. The grave-furniture from this cemetery is rich enough to be exceedingly interesting, though there are no pieces that attain to the magnificence of some of the Vendel finds. The illustrations are admirable and even include x-ray photographs of heavily rusted iron objects, while the grave-plans are, as before, complete down to the last rivet. It is interesting to note that this publication is the last in which we shall have those brilliant *engravings* of the finds that have for so long delighted us; for only the earlier discoveries appear in this form. The later finds, however, are illustrated in equally brilliant photographs, so that we need only to record, and not to grumble at, this noticeable change.

T. D. KENDRICK.

THE FRAZER LECTURES 1922-1932, by divers hands. Edited by WARREN R. DAWSON. Macmillan, 1932. pp. xv and 304, with 36 figures. 15s.

This first volume of lectures given on the foundation of the Sir James Frazer lectureship contains the eleven delivered since 1922 at various British Universities. They cover a wide field of archaeology and anthropology and fully justify the choice of the electors to the lectureship as well as those who established it.

Naturally the dominant theories of the decade are to the fore. Diffusion receives due treatment from Dr Perry, its advocate, on the one hand, and Dr Maretz, its severe critic, on the other. Dr Paul Rivet gives an entirely new aspect of diffusion of the greatest importance. Dr Hartland, Canon Roscoe and Dr Haddon, deal with purely

ANTIQUITY

anthropological subjects of a more specialist character, while Sir Arthur Evans discusses the nature of Minoan religion, with the aid of wholly new material.

Dr Perry's lecture on 'The Age of the Gods' summarizes his general view, already well-known, on the diffusion of all culture and civilization from the Nile Valley. In the short space of a lecture he cannot be expected to document his every generalization; but that hardly atones for the character of some of them. His premiss that there is in the world a continuous process at work, that the oldest civilizations 'have given rise in the outlying areas to daughter settlements that are usually on a lower level of culture' and that these 'daughter settlements in their turn give rise to others' is in no sense a general truth, still less capable of being a premiss. Phoenicia gave rise to Carthage, but Carthage almost from the start was on a higher level of culture than Phoenicia. Central America did not sow culture north and south in the New World. Quite the contrary. The Maya culture burgeoned in the centre of a vast area of a homogeneous character and did not spread far and wide in the American continent. Indeed there seems to have been a converse process at work, not diffusion, but a kind of 'infusion'. America, undeveloped, almost static, with a uniform mode of life, gradually sent inwards, as it were, its own life-blood to one spot where, for some unknown reason, all the requisite material conditions for civilization were present, and there, civilization of a type to which all American life had trended suddenly broke forth. Here is 'infusion', but Dr Perry sees external contacts as the origin of the Maya culture, and so far no single external contact has been found. Similarly one might say that Greek civilization was the result of 'infusion'. A hundred influences from neighbouring lands were concentrating on one area which by nature was ordained for the next outburst of civilization. In the Aegean, as in Yucatan, the concentration of homogeneous influences resulted in a new mode of life. The process might best be illustrated by the metaphor of an electric bulb being crushed by external pressure: as the pressure increases there is a rush into the vacuum—to coin a word, there is an 'implosion'. But Dr Perry believes only in explosive movements. If he tries the alternative he will find it works better!

Dr Rivet strikes a new note when he accepts the general theory of diffusion but sees not a diffusion of civilization but of race, and the race that he proposes as the alternative to Dr Perry's Egyptians is the Melanesian. He sees a vast dispersal of an ancient stock 'à une époque très reculée' which spread from southern Asia and the adjacent islands right across the Pacific to Australia and even to south America. Here is diffusion with a vengeance but it is a diffusion of peoples wholly devoid of the elements of culture, a mere racial movement. And Dr Rivet supplies evidence of some cogence, even in the short space of a lecture.

Sir Arthur Evans calls attention to the character of Minoan religion rather than to its constituent elements. He notes the high moral standards of its beliefs and its picturesque and ethical afterworld. He remarks a dogmatic and transcendental quality far removed from the Hellenic outlook and more akin to Iranian, Christian or Islamic creeds, and an adherence to decorum that to students of the Mediterranean is unexpected.

Sir Arthur Keith analyses the present position of the Aryan theory and proposes a return to original views of Max Müller. He refuses to accept the prevalent view of the European cradle of the Aryan peoples. Unfortunately his lecture as here printed is a mere synopsis, and so it is impossible to deal with his view in any detail.

The contents of this useful volume are somewhat diverse, but the chapters have at least the wide nets of anthropology and archaeology around them to hold them together. The book has not the disadvantages of a *Festschrift*.

STANLEY CASSON.

REVIEWS

IRAQ : Journal of the British School of Archaeology in Iraq (Gertrude Bell Memorial).
Volume 1, part 1, April 1934. Oxford University Press. 18s.

The recently founded British School of Archaeology in Iraq is rapidly developing into one of the most active institutions devoted to the study of the Near East in general and of Iraq and its border lands in particular. Its first important undertaking was the excavation of Arpachiya, near Mosul, under the very competent direction of Mr M. E. L. Mallowan. The present publication begins a series of half-yearly issues to be given 'to studies of the history, art, archaeology, religion, social life, law, geography, and natural history of Iraq, and to a lesser degree of the neighbouring countries, Persia, Armenia, Anatolia, Syria and Arabia, from the earliest times down to about A.D. 1700'. There are many periodicals devoted to the cultural study of Egypt, Palestine, and Syria, but Iraq has been hitherto neglected in this respect. Thanks to this new journal, the last-named country has now come into its own; and to judge from the first issue, IRAQ promises to set a high standard in both contents and outward appearance. The editorial board is composed of A. Rhuvon Guest, Sidney Smith, and J. V. S. Wilkinson.

A glance at the table of contents will give a good idea of the scope of the Journal. H. Frankfort contributes a brilliant discussion on 'Gods and Myths in Sargonid Seals', of fundamental importance for the methodology of such studies. Mrs E. Douglas Van Buren has a penetrating study on 'The God Ningizzida'. R. Campbell Thompson gives a lucid account of 'The Buildings of Quyunjiq', and W. Andrae and J. Jordan make an important addition to the available surveys of 'Abu Habba—Sippar'. C. J. Gadd has a fascinating article on the Game of Fifty-eight Holes, entitled 'An Egyptian Game in Assyria'. The ceramic side is represented by D. B. Harden, who represents 'A typological examination of Sumerian Pottery-Fabrics from Jamdat Nasr and Kish'. The Parthian period is ably championed by Giuseppe Furlani, who describes the 'Sarcophagi Partici di Kakzu', and Islamic architecture has its advocate in K. A. C. Creswell, who discusses 'The Great Mosque of Al-Mansūr at Baghdād'. The introductory statement is a very happy citation from the writings of the late Gertrude Lowthian Bell, dealing with 'Art and Archaeology'. That great pioneer of Iraqi studies could not have wished for a better memorial than a journal such as this. I wish to welcome this new publication particularly in the name of the American School of Oriental Research in Baghdad, which I have the honour to direct.

May I raise in conclusion one mild objection? I notice that IRAQ has decided to follow the spellings adopted by the Iraq Department of Antiquities where topographical terms are concerned. Thus we have *tall*, *jamdat* Nasr, and the like. Was this absolutely necessary? These writings seem to be due to a desire to give a faithful transliteration of Arabic words. Instead they succeed in conveying a wrong impression. Neither *tall* nor *jamdat* have in their native forms anything suggestive of the *a*-sound, and, what is more, it is doubtful whether they ever had. *Tell*, etc., would be entirely adequate from a phonetic standpoint.

E. A. SPEISER.

WALTHAMSTOW ARCHAEOLOGY (pre-Norman). By ANNIE R. HATLEY.
Walthamstow Antiquarian Society, 1933. pp. 30, with 5 plates and 19 text-figures.
Price not stated.

This is the 27th of the very excellent series of monographs published by the Walthamstow Antiquarian Society. The author, in her preface, states that its purpose is to make information available to the general public on the subject of local archaeology. This

ANTIQUITY

it does in an excellent manner, with the aid of appropriate illustrations. The latter however, especially some of the text-figures, could be much improved. Those depicting the manner of hafting stone and bronze implements are very unconvincing. The brooch (fig. 15), would be better described as early second than as 'early first' century. As a popular account the paper certainly achieves its object and is another addition to the series of local archaeologies which is fortunately becoming quite considerable. Perhaps the most valuable result obtained is the collection of the scattered records of the numerous pre-Norman remains, which are listed in an appendix in a very thorough manner.

One must exclaim at the format. The page measures no less than $9\frac{3}{4}$ by $12\frac{3}{4}$ ins., while the letterpress occupies a space only $4\frac{3}{4}$ by $7\frac{1}{4}$ ins.—that is only 27 per cent. of the space! A large page and good margin are luxuries, but this seems excessive.

MARK REGINALD HULL.

ANCIENT MONUMENTS AND HISTORIC BUILDINGS: official guides.

H.M. Office of Works. *H.M. Stationery Office, Adastral House, Kingsway.*
Sixpence each (postage extra).

This admirably conceived series of guides to buildings under the care of H.M. Office of Works should meet with a quick response from the travelling public, who are more than ever ready to be interested in descriptive matter if written as lucidly and concisely as are these guides. Among those published this year are Harlech Castle, Helmsley Castle, Kensington Palace, Old Sarum, Portchester Castle, Richmond Castle, the Bishop's Palace at St. Davids, St. Mawes and Pendennis Castles.

Among the writers are Sir Charles Peers, lately Chief Inspector of Ancient Monuments, Mr J. P. Bushe-Fox, his successor, Mr W. J. Hemp of the Welsh Commission, and others who have intimate knowledge of the buildings they describe. A note on the history of each is followed by an architectural description accompanied by a plan and one or two plates. In some cases, such as those of Portchester and Harlech castles, the plan alone is worth the modest sixpence asked for each guide. Those who are planning tours to include the monuments under the care of the Office would do well to provide themselves with guides beforehand (to be obtained direct from the Stationery Office or from any bookseller) and this prompts us to suggest that information as to the times when access to the buildings can be obtained would be useful.

R.A.

ANCIENT ARCHITECTURE: a commentary in verse. By CHESTER H. JONES.

B. T. Batsford, 15 North Audley Street, W.1, 1933. pp. xvi, 208, with 149 illustrations. 15s.

This book is in some sort a memorial to the young and brilliant author whose early death has deprived modern architecture of one of its most promising students. The foreword by Sir Edwin Lutyens says all that need be said on the subject matter of the book, which is by way of being a summary of ancient and classical architecture, couched in the form of verse. It shows considerable powers of observation and just criticism, and in places is enlivened by a pretty wit. It would seem more appropriate to the subject if this review too were set forth in at least blank verse. The most attractive features of the book are the often admirable black and white sketches which appropriately set off the playful fancy of the text. It is a pleasant work to handle and may well serve as an introduction to the study of architecture to those who are repelled by the jargon of more solid treatises.

A. W. CLAPHAM.

REVIEWS

THE SKELETON OF BRITISH NEOLITHIC MAN, including a comparison with that of other prehistoric periods and more modern times. By JOHN CAMERON, M.D., D.SC. *Williams and Norgate*, 1934. pp. 272, with 51 plates and figures and 96 tables. 15s.

The association of the medical profession with prehistoric archaeology has, in this country, been both notable and of long standing ; commencing as it does with Sir Thomas Browne and continuing through Stukeley and Thurnam to those eminent archaeologists of the present day who combine a lively interest and skill in the study and restoration, not only of the lives of their remote ancestors, but of the bodies of their contemporaries. But the majority of archaeologists, working within the restricted bounds enforced by the high degree of specialization in modern scientific research, have to study man by his works alone—the disjecta membra of his daily life as typified by potsherds or flint implements, habitation-sites or graves—and leave to the professed anatomist the interpretation of the skeletal remains which they have been able to place in their appropriate cultural framework. It is to the anatomist that we turn for the completion of the picture, as a painter's apprentice, having laboriously depicted the satins and velvets, the jewels and the head-dress of the royal sitter, might have asked his master to paint in the features. To all archaeologists a book with such a title as Dr Cameron's holds out a promise of new light on many obscure points, and to those of us who are wandering in that labyrinth of conflicting and involved evidence, the British Neolithic period, there comes the hope that, Ariadne-like, Dr Cameron may be presenting us with a clue that may eventually lead us in the right way. But it is unfortunately a vain hope. 'The hungry sheep look up, and are not fed'.

A book dealing with the skeletal remains of prehistoric man may be judged from two standpoints—that of the anatomist, and that of the archaeologist. The present reviewer is not competent to criticize the technical side of the anatomical evidence, and consequently the review is written primarily from the archaeological viewpoint. It is greatly to be regretted that, from this viewpoint, the book fails utterly. The following passage, written in connexion with the peculiar development of humeri, attributed by Dr Cameron to the muscular activity of slinging, gives the incredibly amateurish tone of the whole work.

'There can be no doubt that the sling was freely used in Ancient Britain as a weapon of offence, though the author can find no reference to it in history books. He has, however, recollections from his early youth of illustrations of ancient battle scenes, in which slingers were represented, both in the attack and in the defence. Shakespeare certainly recognized the value of this ancient weapon, for he makes Hamlet in his famous soliloquy ask—

'Whether 'tis nobler in the mind to suffer

The slings and arrows of outrageous fortune'. (p. 206).

After this, we are in some measure prepared for such passages as that on page 217, where the author describes, with much circumstance, how he 'by a lucky chance discovered the etymology of the word Balearic'—a discovery which could be made by reference to any Latin dictionary, while our old friend Lemprière gives the whole story, complete with the reference to Strabo. And Mr Rudyard Kipling would probably be as surprised as was the reviewer to find himself twice quoted (p. 214, p. 222) as an archaeological authority in a book which purports to be a technical contribution to scientific research.

In the final chapters, Dr Cameron's archaeological ineptitude becomes still more apparent. In a manner which one cannot but envy, he reduces British prehistory to the

ANTIQUITY

stark simplicity of three simple and straightforward invasions—Neolithic, Bronze and Iron—and confidently identifies the Silures of Tacitus with the Neolithic aboriginals. The multiple strains in the British Neolithic; the dual, or possibly even triple nature of the Beaker invasions; and the complicated intermingling of immigrations throughout the Late Bronze Age and the Iron Ages, A, B, and C, are to him unknown. His archaeology appears, in fact, to be a quite remarkable anachronistic survival from half a century ago. Such an archaeological equipment does not prepossess one in favour of the more anatomical side of the work. It is unfortunate, for instance, that his basis should be the Coldrum series, already described by Sir Arthur Keith. These bones come from a not over well recorded excavation in a megalithic Long Barrow of unusual type, belonging to a small group geographically isolated from the main areas of such monuments in England. It is clear that inferences drawn from such material cannot, with fairness, be considered typical for Britain as a whole. Following this we have lengthy descriptions of the Trent, Tilbury and Bournemouth skulls, all undated by archaeological associations. Obviously, unless the basic types are closely dated to one or other of the Neolithic cultures by associated finds, subsequent generalizations become valueless. It is true Dr Cameron has utilized the work of Schuster and of Morant, but apparently without the realization that Schuster's paper in *Biometrika*, vol. IV (1905), is archaeologically uncritical, comprising as it does secondary as well as primary interments from Long Barrows. We look in vain for any reference to the pioneer papers of Thurnam and Rolleston, which, while they may be anatomically out of date, are still eminently sound archaeologically. Nor do the skulls from Wor Barrow, published in such exceptional detail by Pitt-Rivers, find a mention; instead we have such obvious padding as the dissertation on the folk-lore of the Os Sacrum (p. 233).

Under the heading 'Injury to Bone' (p. 234), we naturally expect fresh light on the vexed question of the cleaving or smashing before death of certain skulls from Long Barrows, on which the views of Thurnam and Rolleston were so sharply divided, but no mention of the problem is made; nor in discussing diseases as shown on bones (p. 235) is any mention made of the well marked case of rickets, shown by the characteristic 'Parrot's nodes' on an Early Bronze Age skull from Gellygaer, Glamorgan (*Ant. Journ.* III, p. 21) or of the less certain Bronze Age cases claimed by Rolleston from Rudstone, Yorks, and Ryehope cave, Durham (*British Barrows*, p. 700).

In the chapter to which the student of the Neolithic period would perhaps turn first—that comparing the British Neolithic skulls with these from the Mediterranean area—we see that the author is quite unfitted for the task of correlating cultures differing widely in space and characteristics. To him, Neolithic is Neolithic all the world over, and he makes no mention of the archaeological evidence which points to one of the main streams of our British Neolithic culture as coming from North France and the Rhineland, nor does he even mention Morant's exceedingly important, though admittedly tentative, conclusions based on biometric methods:—'The British Neolithic population is almost invariably said to be of "Mediterranean" type, but judging by these methods, that is now entirely belied as, of all the D type series, it is one furthest removed from the Mediterranean peoples, while it stands close to the neighbouring Anglo-Saxon and Reihengräber types' (*Biometrika*, vol. XXV, p. 352).

In conclusion, we can only feel that this is, to say the least, an unfortunate production. It in no way advances our knowledge of a particularly involved problem, and in fact serves to complicate the issue by drawing a red herring across the trail of serious research.

M.I.A.R.

REVIEWS

PRE-FEUDAL ENGLAND: THE JUTES. By J. E. A. JOLLIFFE. Oxford Historical Series. Oxford University Press, 1933. pp. VIII, 122. 7s 6d.

The peculiarities of the Kentish social system have attracted the attention of a long series of scholars, but no one has hitherto attempted to trace the customs of the locality to their ultimate source and to reconstruct the society of the primitive kingdom before it had been influenced by Saxon usage and feudal law. Maitland, while allowing for the antiquity of some of the customs of Kent, concludes that 'probably we shall do well in looking for the explanation of what has to be explained to the time which lies on this side of the Conquest'. Mr Jolliffe's investigations however have led him to regard the medieval customs as in a large measure the survival of the social usages of the Jutish kingdom of Hengist. He depicts an attractive phase of social development; a nation of free men living in hamlets, cultivating compact tenements, *sulungs* or *juga*, and paying rent or *gafol*, one of the incidents of medieval gavelkind, to their king. Hamlets are grouped into *regiones*, lathes, in the earliest times twelve or thirteen in number, each assessed at 80 *sulungs* and each having as its administrative centre a royal village, *villa regis*, under the charge of the king's reeve. The break-up of the lathe, originally 'not only the unit of royal demesne and of common right in the Weald but also the primary unit of the folk and the king's administration' began at an early date with the extensive grants made to churches by the Kentish kings, but manorialization was never more than partially complete and the court of the lathe in medieval times combines to some extent the functions of a local court and a manorial court, enforcing the performance of services due from gavelkinders because these services, payable in feudal times to individual lords, were in origin public burdens rendered only to the king.

Mr Jolliffe has presented to his readers in a modest form—perhaps too modest since there is no index and the references are reduced to a minimum—a highly important piece of work which no student of early English society can afford to ignore. His reconstruction of the phases through which Kentish society passed is ingenious and coherent but there are times when he seems to experience difficulty in finding evidence to connect the customs of medieval times with the remote past, and it is doubtful whether the charters which he cites will always support the theories raised upon them. There is reason to believe too that the social organization of other parts of England resembled that of Kent more closely than Mr Jolliffe will allow—many ceorls of Wessex no less than those of Kent must have paid tribute to the king alone before royal grants to churches and to *gesiths* became numerous. Throughout, the author contrasts Kent with 'the Midlands', using the term *Midland* not, like Professor Gray, with reference to the open-field system of husbandry alone, but as covering the entire social organization of this wide region, a usage which ignores the marked peculiarities of the northern Midlands. In a not wholly convincing epilogue Kent is represented as the cradle of English liberty, but Mr Jolliffe never adequately explains the fact that 'there is little in Domesday Book that marks off Kent from the surrounding counties, little indeed to make us think that at the date of the survey it was a particularly free county, that it was as free as the shires of the Danelaw'.

In a later section the author compared, so far as is possible, the social systems of the primitive English kingdoms and those of the Germanic peoples on the Continent, seeking thereby to explain the origin of the customs of the earliest settlers in Kent. His illuminating discussion leads to the conclusion that the Saxons and Jutes were members of two distinct racial groups, and the affinities of the latter with the Franks, already established by archaeological evidence, are here emphasized. Whereas however archaeological evidence would restrict the primitive kingdom to the region lying east of the

ANTIQUITY

Medway, Mr Jolliffe, on the strength of certain sporadic resemblances in social organization, postulates a Jutish kingdom comprising not only the whole of Kent but parts of Sussex, Surrey and Hampshire as well. The extent to which the nature of the country may have determined local custom is however not given due consideration and the author is perhaps too much inclined to regard agrarian economy as the outcome of racial influences alone. It is scarcely less entertaining to read than to propound revolutionary views regarding the English settlement; but we are rapidly approaching a phase of Anglo-Saxon studies in which the paucity of material will present fewer problems to the general historian than the multiplicity of theories evolved by scholars who are perhaps too ready to apply the term discredited to such literary evidence as conflicts with their own views.

R. R. DARLINGTON.

THE ENGLISH ANTIQUARIES of the Sixteenth, Seventeenth, and Eighteenth Centuries. By H. B. WALTERS. *Published at Primrose Hill, London by Edward Walters, 36 Oppidans Road.* 1934. pp. VIII, 80, with six portraits (frontispiece and five in text). 10s 6d.

Mr Walters divides his antiquaries into four periods—Elizabethan, 17th century, 18th century, and county historians—and those he has chosen are familiar to every one with a knowledge of the bibliography of the topography of England. The volume is an expansion of a paper read to the Royal Society of Literature, and while it does not profess to give an exhaustive account of the lives and works of those dealt with a useful list of sources for additional information is added.

Mr Walters states that he has endeavoured to do for a class of scholars hitherto neglected what others have done for more celebrated persons. Indeed if his first chapter is taken as an example it is surprising how little attention has been given to the lives of such 'fathers' of English topography as Leland, Stow, and Camden. Leland's Itinerary is invariably quoted in papers or books dealing with local history; Stow's Survey ranks as a first authority on London; Camden is another quarry to which many writers have resorted.

With the 17th century we come to those who confined their researches to particular districts, and the names of Dugdale, Habington, John Aubrey, Antony Wood, and Robert Plot are alone sufficient to make the century notable for its topographical output, though there were other workers, such as John Smyth of Nibley, who, if they did not publish, prepared material from which a later generation has reaped the harvest. For the next century Mr Walters gives us Thomas Hearne, whose diaries are so full of information concerning Oxford and the University; Browne Willis for his ecclesiastical history; William Cole, close friend of Willis, who stands for Cambridge as Wood does for Oxford; and William Stukeley, who receives longer notice than most 'as an outstanding personality'. Mr Walters mentions as an additional claim for his own interest in Stukeley that he is a great-great-grandson, but no one can contest that as the foremost antiquary of his century the ten pages given are none too much. Stukeley was an enthusiast, and if he did make slips he may be forgiven. In ANTIQUITY for September last (pp. 328-9) Mr Crawford has given an instance of the accuracy of Stukeley's observation and the value of his drawings as records of antiquities long since vanished.

On reaching the 'county historians' Mr Walters cannot have found selection easy for many names must have occurred to him. This last chapter might quite well have come under the heading of the 18th century for the main work of the topographers

REVIEWS

chosen was done in that time. Bridges' *Northants*, Hutchins' *Dorset*, Morant's *Essex*, Manning and Bray's *Surrey*, Hasted's *Kent*, Gough's *Camden*, the Lysons, Nash, and Prattinton are not a bad company and to them might be added others such as John Nichols, Sir Robert Atkyns, Bigland, Fosbroke and, above all, Colt Hoare.

In the notice of Samuel Lysons a slight correction should be made. There were not three volumes of his *Views and Antiquities* of Gloucestershire. He published eleven parts of *Etchings of Views and Antiquities* with a title-page dated 1791, and in 1803 issued a larger collection of plates in which many of the original ones were redrawn and others of new subjects added. Copies with a title-page dated 1804 are also found, but all the plates correspond to the volume of 1803, published as *A Collection of Gloucestershire Antiquities*.

The apparatus now available for historians has opened up sources unknown to earlier workers, and the rich results are shown in such works as Hodgkin's *Northumberland* and the volumes of the V.C.H., but we can have nothing but admiration for the older Antiquaries whose folios stand in stately array on library shelves.

The book is issued in an attractive form. It was printed by hand on Kelmscott handmade paper and the six woodcuts are a pleasing feature.

ROLAND AUSTIN.

THE ROYAL COMMISSION ON ANCIENT AND HISTORICAL MONUMENTS AND CONSTRUCTIONS OF SCOTLAND: Eleventh report with inventory of monuments and constructions in the Counties of Fife, Kinross, and Clackmannan. *Edinburgh: H. M. Stationery Office, 1933. pp. LXI, 352 with 511 illustrations and plans, and map of the shires. 37s 6d.*

The latest inventory for Scotland follows the lines of its predecessors in general arrangement and like its immediate forerunner (Mid and West Lothian) includes more than one county. However the district is geographically the same and consists of the peninsula between the Firths of Forth and Tay, extending up the former to near Stirling and along the banks of the latter to within a few miles of Perth.

Though somewhat insulated, the 'Kingdom of Fife' was nevertheless an important highroad between Edinburgh and the North for the Highlands beyond Perth and the more prosperous east coast, including Dundee and Aberdeen. The harbours along its southern shore in the 17th and 18th centuries carried on a considerable trade with the low countries; St. Andrews was the seat of the Archbishop and Metropolitan of Scotland. The king also had two palaces within the district, at Dunfermline and Falkland. Therefore it is not surprising to find a considerable wealth of monuments of almost all ages.

It is true there is no definite trace of Neolithic culture nor did the Roman occupation, in spite of many theories about a hundred years ago, leave any mark beyond the discovery of one or two hoards of coins. However there are a number of cairns, standing stones and several forts noted. Of the latter four have been admirably illustrated by air-photographs.

Though St. Andrews did not become an archbishopric till 1472, it had been considered as head of the Scottish Church since the beginning of the 10th century and the cathedral, as befitted, was the largest church in Scotland. It is now an utter ruin but its surrounding monuments, including St. Rule's church, the priory and the great precinct wall with its gates dating from 1520, form an exceedingly interesting group. In St. Andrews there are also the college chapels of St. Salvator and St. Leonard, the remains of the Blackfriars, the 15th century tower of the parish church and the archbishop's castle on

ANTIQUITY

the cliff above the sea. Among the other ecclesiastical monuments are the abbeys of Dunfermline, Inchcolm and Culross. The first named is notable for its magnificent Norman nave, and Inchcolm for the most perfectly preserved cloister and domestic buildings in Scotland. The period after the Reformation also produced some curious rather than beautiful examples in the square church at Burntisland built in 1592 as an attempt to produce a Presbyterian plan, and the misunderstood Gothic of Dairsie, Fordel and Balcarres a few years later resulting from the re-establishment of Episcopacy.

Parish churches are fairly numerous but in many cases altered out of all recognition. Leuchars is a fine and elaborate example of Norman, and Aberdour a simple version of the same. St. Monans is a good specimen of the late 14th century with a definite Scottish character.

Domestic work is represented from the early mote-castles through the transitional periods of courtyard and tower-plans to that most interesting of all periods in Scotland around the beginning of the 17th century when the modern house was evolving out of the castle, as typified by Earls Hall and Kellie. The superb houses (17th-18th centuries) of Melville and Kinross are noted (the former without even a plan) and it is a matter for regret that the powers that be stop the inventory at 1707, at which date Scotland had by no means ceased to build with national character. Fife notably contains more dovecots than any other county and no fewer than 93 are recorded, which seems out of all proportion to the 22 and 25 respectively of the Mid and West Lothian and East Lothian inventories. This fact had its place in the saying descriptive of the possessions of a Fife laird 'a puckle land, a lump o' debt, a doocot and a law plea'.

As far as the study of Scots architecture is concerned there can be no doubt that the inventory is quite one of the most valuable and comprehensive yet produced. By reasonable accounts of buildings as they are, and not for what may (or may not) have happened within them, it fills a noticeable gap in the vast though painfully sentimental literature which appears every year on Scotland.

BYZANTINE ARCHITECTURE AND DECORATION. By J. ARNOTT HAMILTON.

B. T. Batsford, 1933. pp. viii, 172, with 71 plates and 47 figures. 18s.

This survey of Byzantine architecture forms one of the publisher's Historical Architecture Library and is based on a thesis of the author for which the University of Edinburgh granted the PH.D in 1925. It would be unreasonable to expect in a work of this length more than an outline of so vast a subject as Byzantine art and decoration, nor need we expect any particularly new presentation of the subject in a volume written as a general handbook. We admit however to some slight disappointment that here, as in many other architectural works, the bulk of the volume is occupied by descriptions of individual buildings rather than an attempt to crystallize the salient features of an age or district. This seems to be particularly necessary in Asia Minor where the general evolution of architectural forms is unusually complicated.

With these reservations Dr Hamilton's volume provides a vast mass of information in a convenient and readable form and is illustrated by an admirable series of photographs and a sufficiency of plans.

A. W. CLAPHAM.

Index

- Abbo of Fleury, 190
 Abercorn, cross, 55
 Abercromby, John, Lord, 8, 9
 Acheulean (Upper), industry, Palestine,
 148, 149, 150
 Tools, 95-6
 Acheuleo-Mousterian industry, Palestine
 (*illus.*), 147, 148, 149
 Adamnan's life of Columba, 168 ff.
 ADDISON, WILLIAM; Nomori of Sierra
 Leone (*illus.*), 336-8
 ADLER, MICHAEL; Human sacrifice in
 Antiquity, 332-3
 Aebba, of Northumbria, 202, 203, 204
 Aedh, Irish king, 172
 Aeschylus, epigrams, 176-8
 Aethelfrith of Northumbria, 171
 Aethelswith, Mercian queen, 201
 Agricola, 387
 Agriculture, Celtic system, 10
 Italy, 278-9
 Prehistoric, in Norway, 237-9
 Agrippa Postumus, villa of, 272
 Ahmad bin Fudhlan, 58, 59
 Aichbühl culture, 27
 Air-photographs :—
 Bedouin enclosure, Syria, 376 (pl. VIII)
 Collection at Ordnance Survey, 422
 Dam at Harbaqa, 376 (pl. VI)
 Harrow Hill, 216 (pl. IX)
 Limes fort, Syria, 376 (pl. III)
 Mile ditches, Royston, 216 (pls. XII, XIII)
 New Barn Down, 216 (pls. X, XI)
 Reservoir and aqueduct, Syria, 376 (pl. V)
 Road, Palmyra, 376 (pl. VII)
 Roman roads, Syria, 376 (pls. I, IV)
 Temple of Baal, Palmyra, 376 (pl. II)
 Air-survey, Syria, 373-80
 Alban (Saint), dedication, 294
 ALBRIGHT, W. F.; Hittite scripts, 453-5
 Alfoldean, Roman station, 351
 ALFORD, VIOLET; Santa Orosia: a thau-
 maturgic Saint, 281-9
 Allen, G. W. G., 217
 Almerian culture, 26
 Alphage (Bishop), dedication, 298
 Ancholme, 198
 Ancient Monuments Acts, 414-19
 Board, 417
 Guides of H.M. Office of Works, 490
 Inspector, 414, 415, 419-20
 Protection of, 414-21
 Royal Commission (England), 420-21
 Anderson, Joseph, 58
 Andrae (Dr), 467
 Anglo-Saxons in Fenland, 185-201
 Animal remains, Palestine, 138, 142, 144,
 146, 148
 Anna, East Anglian king, 200
 Anthesteria, Greek feast, 460
 Antiquaries, English, 494-5
 Antiquities, mapping by Ordnance Survey,
 422
 Arbor Low, 415
 Archaeology and the State, 414-28
 Air survey, 10
 Bibliography, 369, 370
 China, 350
 Development of its study, 5-23
 Institute of, Peru, 349, 350
 Institute of, London, 455
 Use of distribution maps, 8-10
 Ardashir, 376
 Argamoyne, battle, 173
 Argive Hera, sanctuary, 468
 Arosætna tribe, 186
 Arpachiyah, 225
 Arthur (King), 203

ANTIQUITY

- Assyria, pottery, 225
 Athens, financial documents, 122
 Atlantis, 107
 'Atlit, excavations, 107
 Aude, cave culture, 34
 Augustine (Saint), 292
 Augustus (Emperor), 385
 Aurelian (Emperor), 377
 Aurignacian industry (*illus.*) 138-43, 147, 148, 149
 Australia, native races, 114-16
 Auvergne, agriculture, 117
 Aville sur Chize, cave, 36
 Avebury, 415
 West Kennet avenue (*illus.*), 344-7, 469
 Axholme, 198

 Ballintoy, excavations, 330
 Ballyalton, excavations, 330
 Baluchistan, archaeology, 246
 Barrow-burial, 101
 Barrows, map of Trent Basin, 124
 Giant's Hills (Lincs.), 470
 Pond, 459-61
 Sussex, 473
 Bassa, 202
 Bate, D. M., 138, 142, 144, 146, 148
 Bath, hoard of gems, 462
 Battle-axe culture, 120-2
 Battle-magic, 171-2
 Baylis (Judge), *on* Treasure Trove, 423
 Beacharra (Kintyre), 36
 Beaches, raised (*illus.*), 303-9
 Beachley, 22
 Beaker, origin of name, 9
 Settlements, 8
 Ware, 25, 41
 BEETON, ALAN ; History films, 207-10
 Beldam, —, 216, 217
 Belgae, 6
 Belgic ditches, 6, 19
 Bergen, 118
 Berlin museum, 467
 Bexley, dyke (*plan*), 218-22
 Birrens, Roman fort, 339
 Bize, cave-site, 29, 30, 34, 41
 Bloxham, Romano-British site, 229
 Blümel, C., 152 ff.

 Boat-burial, 487
 Bodvoc (Welsh prince), 401, 411, 412
 Stone, Glamorgan (*illus.*), 401
 Bokerly Dyke, 19
 Book of Durrow (*illus.*), 54, 56, 57
 Books received, 255-6
 Boscastle, 18, 19
 Botolph (Saint), 191, 298
 Bowl-scutcheons (*illus.*), 47, 52, 54
 Bradley, A. B., 470
 Bran Ditch, stockade, 434
 Breiddin Hill, excavations, 471
 Breton culture, 37
 Breuil, Abbé, 67, 69, 71, 148, 149
 Britain, ancient writers on, 382
 Christianity in, 391
 Coinage, 392-4
 Prehistoric, bibliography, 472
 Roman coinage (*illus.*), 392-4
 Roman occupation, 383-90
 Britannia, 381-94
 Types on coins (*illus.*), 392-4
 British Isles, geological movements (*illus.*), 303-9
 British Museum, 426
 and treasure trove, 424
 Temporary exhibitions, 95
 BROMEHEAD, C. N. ; Mines and Gems, 462-3
 Brøndsted, J., 43
 Bronze Age, chronology of Cretan, 363-5
 Farm, 215, 216, 473
 Bronzes, Luristan, 361
 Browndod Hill, excavations, 330
 Broxbourne, Mesolithic site, 474
 Brunanburh, battle, 338-9
 Buckinghamshire, ancient monuments, 421
 Buckles, Burgundian, 55
 Budge, Sir Wallis, 470
 Burgh castle, monastery, 202
 Burial, barrow, 101
 Burkitt, M. C., 142
 Burnswark, 338
 Burpee, Lawrence J., 465

 Caburn, stockade, 434
 Cadwallain, 294
 Caen stone, 18
 Caenby, silver disk (*illus.*), 54, 55

INDEX

- Caer Drewyn, cattle-fold, 432
 Caer Golud, 202, 203
 Caersws, Roman fort, 109
 Caer y Twr, hill-fort, 473
 Cairo, 205
 Campignian culture, 25, 26, 31, 475
 Canada, history film, 465-6
 Canterbury, Saxon churches, 293
 Capercaillie, 74-7
 Capsian flints, 138, 140, 149
 Carausius, 389, 390
 Carndonach, 48
 Carpenter, Rhys, 152, 155, 156, 160, 162, 163, 166
 CARRINGTON, R. C.; Eruption of Vesuvius (*illus.*), 330-2
 Some ancient Italian country-houses (*illus.*), 261-80
 Cart-ruts, Malta, 339-42
 Casson, Stanley, 152, 157, 158, 159, 160
 Catenoy, 33, 35
 Cathach psalter (*illus.*), 171
 Cato, on farming, 479
 Caton-Thompson, G., 142
 Catotigrinus, 401
 Cattle-raiding, 429-36
 Causeway-roads, Yucatan, 103
 Cave, Chou-Kou-tien, 103
 Ballintoy, 330
 Celtic art, 43-57
 Earthworks, air photographs, 422
 Field-system, 216
 Cemetery:—
 Chiusi, 109
 Cyprus, 89
 Jericho, 108
 Saxon, 441
 Szentes, Hungary, 468
 Tuna, 487
 Ur, 227, 448-52
 Cenn Cruaich, place-names, 350
 Cerdic, 46
 Chaerammon, shorthand writer, 465
 Chalain, pottery (*illus.*), 27, 29, 31
 Chalcolithic period, Western Europe, 24-42
 Charterhouse (Somerset), signet gems, 462
 Chassey ware (*illus.*), 27, 29, 30, 31, 33, 34, 35, 37, 40, 41
 Chatelperron flints (*illus.*), 138, 139, 147
 Chellean tools, 95-7, 149
 Chester, battle, 171
 Chetro Ketl, 103
 Chichester, earthworks, 472
 Childe, V. Gordon, 24 ff, 90, 91, 93, 106, 223, 469
 Chimpanzee, human association with, 471
 China, archaeology, 350
 Chiusi, necropolis, 109
 Chou-Kou-tien, cave, 103
 Chronology, Cretan Bronze Age, 363-5
 CLAPHAM, A. W.; origins of Hiberno-Saxon art (*illus.*), 43-57
 CLARK, J. G. D.; Archaeology and the State, 414-28
 Neolithic houses, Denmark (*illus.*), 206-7
 Claudius (Emperor), 386
 Climate, Europe, 367-8
 Influence of, 15
 Clonlun, excavations, 330
 Clonmacnoise, 48, 49, 52
 Close, Sir Charles, 422
 Cloven Way, 19
 Coclé (Panama), excavations, 229
 Coins:—
 Falkirk, 102, 103
 Ginderup, Jutland, 469
 Representations of Britannia, 391-4
 Sharaoh, 472
 Coleraine, battle, 173
 Colgrave, Bertram, 98, 100
 Coludes burh, 202-4
 Columba, magic of, 168-75
 Shrine containing Columba's gospels (*illus.*), 171
 Comgall, abbot of Bangor, 173
 Conguel, Brittany, 36, 37
 Conscience, dawn of, 476-9
 Constantine the Great, 390
 Constantius (Emperor), 389
 Copper-smelting, 470
 Corded ware, 41
 Cordova, 50, 51
 Costume, catalogue of, 235-7
 County Councils, powers as to ancient monuments, 416
 Craniology, 106

ANTIQUITY

- CRAWFORD, O. G. S., 8-10, 14, 19, 428
 Anonymous life of Saint Cuthbert, 97-101
 Battle of Brunanburh, 338-9
 Coludes burh, 202-4
 Human sacrifice, 334-5
 Long Meg, Cumberland (*illus.*), 328-9
 Magic of Columba, 168-75
 Mile ditches, Royston (*illus.*), 216-18
 Rock sculptures (*illus.*), 463-4
 Sidonius and his times, 81-4
 The 'aquatile beast' of Ness, 85-6
 Cremation, 225
 Cemeteries, Saxon, 441
 Scandinavian ceremony, 58-62
 Cromerian culture, 96
 Cropredy Bridge, 11
 Crosses :—
 Abercorn, 55
 Carndonach (*illus.*), 48
 Faeroe Islands, 107
 Lindisfarne (*illus.*), 55, 56
 Northallerton, 55
 Northumbrian, 55
 Templeneiery, 48
 Crowland, 197, 200
 Crufensee, 38
 Crundale Down, sword pommel (*illus.*), 54, 55
 Culture, race and, 90-3
 Diffusion, 488
 Cumberland, prehistoric remains, 361-3
 Cuneiform script, 453-5
 Cunningham, William, 6, 7
 Cup-marks (*illus.*), 464
 Curle, A. O., 471
 Currency-bars, 210-11, 336
 CURWEN, E. C. ; Flint-miner's dwelling and
 Bronze Age farm, Sussex (*illus.*), 215-16
 Cuthbert (Saint), anonymous life, 97-101
 CUTTLE, W. L. ; Problem of the Hermes of
 Olympia (*illus.*), 151-67
 Cycladic chronology, 363-5
 Cynan, son of St. Cynwyd, 412
 Cynric, 46
 Cynwyd (Saint), 412
 Cyprus, ancient monuments, 260, 351
 Excavations (*illus.*), 86-90
 Neolithic settlement, 86-9
 Preservation of monuments, 90
 Dacia Felix, capital, 470
 Daiet-er-Roumi, ruins beneath the lake, 224
 Danubian culture, 26, 41
 DARBY, H. C. ; Domesday woodland, East
 Anglia, 211-15
 Fenland frontier in Anglo-Saxon England
 (*maps*), 185-201
 Darius, inscription, 97
 Darmsdenian culture, 96
 David (Saint), shrine of, 172
 Delos, 483
 Demetia, 105
 Denmark, neolithic houses (*illus.*), 206-7
 Deverel-Rimbury culture, 215
 Devet, 105
 Devil's Dyke, 190
 DIKAIOS, P. ; Excavations in Cyprus (*illus.*),
 86-90
 Dinsmoor (Professor), 152, 161
 Disk, Saxon (*illus.*), 54, 55
 Distribution-maps, first used, 8-9
 Domesday settlement, East Anglia, 189
 Domesday woodland, East Anglia, 213
 Saxon churches, London, 294, 298
 Saxon objects, London, 295, 299
 Divining, 350
 Dog, Ivicene, 470
 Dolaucothy (Wales), gold mines, 462
 Dress, catalogue of, 235-7
 Druids, 384, 385, 386
 Duckworth, Sir G. E., 420
 Dumbretton, 339
 Durrington, stockade, 434
 Dykes, 6, 19-22
 Bexley (*plan*), 218-22
 Earthworks :—
 Chichester, 472
 France, 123
 Salisbury Plain, 231-3
 Sutton Common, Yorks, 104
 See also Dykes
 East Africa, Chelleo-Acheulean culture, 95-7
 Early man, 95-7
 East Anglia, 186, 190, 194-7
 Woodland (*map*), 211-15
 Ebchester, monastery, 202
 Edmund (Saint), 299

INDEX

- Egypt, development of morals, 476-8
 Ely, monastery, 196
 Erech, excavations, 467
 Erimi, neolithic settlement, 86-9
 Erkenwald (Bishop), 299
 Ermine Street, 4
 Er Yoh, pottery sherds, 37
 Escutcheons (*illus.*), 47, 52, 54
 Essex, ancient monuments, 421
 Place-names, 468
 Woodland, 214, 215
 Eternalis Vedomavus, 401
 Ethelbert (King), 292, 296
 Ethelburga (Saint), 299
 Etheldreda (Queen), 196, 200, 201
 Europe, climatic changes, 366-7
 EVANS, E. E.; Prehistoric archaeology in
 Northern Ireland, 329-30
 EVANS, E. M. P.; Maltese cart-ruts,
 339-42
 EXCAVATIONS :—
 'Atlit, 107
 Ballintoy, co. Antrim, 330
 Ballyalton, co. Down, 330
 Breidden Hill, 471
 Brownod Hill, co. Antrim, 330
 Chiusi, 109
 Clonlum, co. Armagh, 330
 Coclé, Panama, 229
 Cyprus (*illus.*), 86-90
 Gaza, 352
 Goward, co. Down, 329
 Hembury fort, 474
 Holland, 106
 Ireland, 329-30, 471
 Jarlshof, 471
 Jericho, 108
 Kachemak Bay, Alaska, 104
 Kodiak Island, Alaska, 350
 Lucania, 468
 Maiden Castle, 469
 Malta, Siberia, 228-9
 Mapungubwe, Transvaal, 103
 Meare Lake, 469
 Minturnae, 241-3
 New Barn Down, Worthing (*illus.*),
 215-16
 Nineveh, 108
 Excavations, *continued* :—
 Policy as to covering sites, 371
 Ras Shamra, 228
 Salmonsbury, 351
 Sarmisegetusa, 469
 Skendleby, barrow, 470
 Tell Asmar, 226, 351
 Tell Duweir, Palestine, 352
 Titterstone Clee Hill, 473
 Troldebjerg, Denmark (*illus.*), 206-7
 Ur, 227, 448-52
 Uruk (Erech), 467
 Wady al-Mughara, Palestine (*illus.*),
 133-50, 475
 Whitehawk Camp, 474
 Expeditions :—
 American School of Prehistoric Research,
 133
 British School of Archaeology in Jeru-
 salem, 133
 French, at Ras Shamra, 228
 Kenya, 227-8
 Oriental Institute of Chicago, 226, 228,
 351
 Peabody Museum, Coclé, 229
 Wellcome, Tell Duweir, 352
 Farm, Bronze Age, 215, 216, 473
 Farm-yard villas, Italy (*plans*), 263-79
 Faeroe islands, crosses, 107
 Faerpinga tribe, 186
 Fahan, 50
 Falaise site, 34
 Falkenstein (Dr), 467
 Farms, Margam Mountain (*illus.*), 402-13
 Favret (Abbé), 39
 Fenland :—
 Anthropological observations, 193
 Domesday woodland, East Anglia (*map*),
 211-15
 Frontier (*map*), 185-201
 Research Committee, 187
 Fermoy, topography, 126-8
 Field-system, Celtic, 216
 Films, history, 207-10, 465-6
 Finavon Hill, fort, 469
 Fitzgerald, J., 420
 Fleam Dyke, 190, 197

ANTIQUITY

- Fleure, H. J., 11, 14
 Flint implements :—
 Aurignacian (*illus.*), 138-43
 Mousterian (*illus.*), 142, 144-8
 Natufian (*illus.*), 135-7
 Palestine (*illus.*), 133-50
 Flint-mines, Harrow Hill, 215
 Font-Yves point, 140
 Forests, submerged, South Wales, 307
 Fort, Finavon Hill, 469
 Fort Harrouard, 33, 35, 40
 Forts, Margam Mountain (*illus.*), 395-413
 Foundation rite, Irish crannog, 348
 FOX, CYRIL, 6, 8, 10, 16, 19, 185, 216, 419,
 Personality of Britain, 10, 11, 13-15
 Study of dykes, 19-22
 and AILEEN; Forts and Farms on Margam
 Mountain, Glamorgan (*illus.*), 395-413
 Frankfort, H., 226
 Frazer lectures, 487-8
 Freeman, E. A., 6, 7
 Fursey, 202
- Gallienus (Emperor), 376, 377
 Gard, ware (*illus.*), 32, 33, 35
 GARROD, D. A. E.; Stone Age of Palestine
 (*illus.*), 133-50
 Gaul, walled towns, 300, 301
 Gaza, excavations, 352
 Gems, 462-3
 Geological movements of the British coast-
 line (*illus.*), 303-9
 Survey, 425
 Gergovia, 117-18
 Germanus (Saint), 46, 391
 Gildas, 290
 Ginderup, hoard of coins, 469
 Girvii, 186, 195, 200-1
 Gjerstad, E., 86, 87
 Glaciation, East Africa, 243-5
 Norway, 366-8
 Patagonia, 245-6
 South Wales, 306
 Tierra del Fuego, 245-6
 Glamorgan, forts and farms (*illus.*), 395-413
 Glass, ancient, 94-5
 Cobalt, 225-6
- Gold collar, Ireland, 228
 Mines, Dolaucothy, 462
 Ornaments, Coclé, 229
 Vessels, Ras Shamra, 228
 Goward, excavations, 329
 Gower coast, raised beaches (*illus.*), 304-6
 Grand Pressigny industry, 39, 40
 Grant-Suttie, G. L. P., 465
 Greece, trade and politics, 356-8
 Greek sculpture, 151-67, 233-5, 246-7
 Shorthand, 464-5
 Green, John Richard, 6, 7
 Greenwell, W., 7
 Gregory (Saint), 292
 Grim's Ditches, 218, 440, 441, 442, 445
 Guernsey, megaliths, 474-5
 Guest, Edwin, 6-7
 Guthlac of Crowland, 193
 Guy, P. L. O., 150
 Gwynedd, 105
 Gyrwa, *see* Girvii
- Habitation-sites, choice of, 14, 15
 Hadrian, 387, 388
 Hallelujah victory, 46, 172
 Hallstatt fibula, 34
 Pottery, 34
 Hand-axes, 95-7
 Acheuleo-Mousterian (*illus.*), 147
 Micoquian type (*illus.*), 147
 Upper Acheulean, 148
 Hanging-bowl, custom in Ireland, 93-4
 Hannover, megalithic tombs, 419
 Harappa script, 252-4
 Harrow Hill, flint-mines, 215
 Harrow-ways, 17
 Hassanein, Ahmed Bey, 63, 65, 66, 67
 Hastings, battle, 11, 12
 Hattic language, 454
 Haverfield, F. J., 13, 290, 369
 HAWKES, JACQUETTA; Aspects of the Neo-
 lithic and Chalcolithic periods in
 Western Europe (*illus.*), 24-42
 Hefenfelth, battle, 171
 Heidelberg jaw, 96
 Heinrich (Dr), 467
 Hélène, M., 29, 34, 35
 Heliopolis, cartouche from (*illus.*), 205

INDEX

- Helladic chronology, 363-5
 Hembury fort, 474
 Herefordshire, ancient monuments, 353-4,
 421
 Hereman, Anglo-Saxon term, 4
 Hermes of Olympia (*illus.*), 151-67
 Hertfordshire, ancient monuments, 421
 Herzfeld (Professor), 228
 Hiberno-Saxon art (*illus.*), 43-57
 Hieroglyphs, Hittite, 453-5
 Hill, Sir George, 423
 Hill-fort, Holy Island, 473
 History films, 207-10, 465-6
 in the open air, 5-23
 Hittite scripts, 453-5
 Hoare, Richard Colt, 5-6, 7
 HOCART, A. M.; Currency-bars, 336
 HOGG, A. H. A., 470
 Dyke near Bexley, Kent (*plan*), 218-22
 Holland, terpen of, 106
 Hollow-ways, 17
 Holy Island, hill-fort, 473
 Homer, 110-12
 Honan, Chinese jade, 104, 105, 229
 Hooke, S. H., 455
 Horgen ware (*illus.*), 38, 39
 Houses, Italian country (*illus.*), 261-80
 Human remains, Palestine, 144, 146
 Human sacrifice, 59, 225, 332-5, 450, 451
 Hunting customs, Wales, 73-80
 Huntingdonshire, ancient monuments, 421
 HUNTINGFORD, G. W. B.; Currency-bars,
 210-11
 Defences against cattle-raiding (*illus.*),
 429-36
 Prehistoric ox-yoking (*illus.*), 456-9
 Terraces in Kenya, 211
 Hurrian language, 454
 Hut-settlement, Pant-y-Saer, 473

 Iberomaurusian culture, 108
 Icknield Way, 17, 217, 218
 Indus Valley script, 252-4
 In Ezzan, 69, 71
 Inscribed stone, Maughold (*illus.*), 49
 Inscription, Bodvoc stone (*illus.*), 401
 Iraq, British School, 489

 Ireland :—
 Celtic art, 125-6
 Linear earthwork, 471
 Origins of art, 43-57
 Prehistoric archaeology, 329-30
 Stone Age, 475
 Isborsk, 310-14
 Ishtar, temple, 108
 Isle of Ely, 192, 195, 196, 197
 Italy, ancient country-houses (*illus.*), 261-80
 Ivicene dog, 470

 Jades, Chinese, 104, 105, 229
 Jarlshof, excavations, 471
 Jericho, necropolis, 108
 JONES, O. T.; Recent Geological movements
 of the British coastline (*illus.*), 303-9
 Julius Caesar, expeditions to Britain, 383, 384
 Jutes, in England, 493-4

 Kachemak Bay, excavations, 104
 Keiller, Alexander, 469
 West Kennet avenue, Avebury (*illus.*),
 344-7
 Keith, Sir Arthur, 136, 142, 144
 Kemal el Din, Prince, 63, 64, 65, 67, 69, 71
 Kendrick, T. D., 46
 Kenya, cattle-raiding, 431-2
 Expedition, 227-8
 Terraces, 211
 Khafaje, 351
 Kodiak Island, excavations, 350
 Krems, 140
 Kubaba, Anatolian goddess, 454

 Lachish, 352
 Lake-dwellings, Jura, 27, 31
 Switzerland, 26, 27
 Lamps, Eskimo, 104
 Lancashire, prehistoric remains, 361-3
 Lancut, 22
 Langton, Roman villa, 243
 Lapis lazuli, 225-6
 Largalinnny, megalith, 330
 Larne beach, 309
 Ware, 36
 Latchet, Newry (*illus.*), 48, 49
 La Tène art, 45, 46, 47, 48, 57

ANTIQUITY

- Leakey, L. S. B., 95, 148, 150
 Leeds, E. T., 10, 37, 185
 Levallois industry, Palestine, 146
 Libyan Desert, 65, 66
 Life, expectation of, 102
 Limes forts, Syria (*illus.*), 378, 379
 Lindisfarne, cross-shaft (*illus.*), 55, 56
 Gospels, 43, 53-7
 Lindsey, 197, 198, 199
 Linear ditches, Salisbury Plain, 232
 Earthworks, 20, 471
 Lissauer (Professor), 9
 Little Salkeld, stone circle (*illus.*), 328-9
 Llangynwyd church, 412
 Loch Ness, monster, 85-6, 468
 LONDON :—
 Ancient monuments, 421
 Basilica, 291, 292, 296, 437, 438, 439
 Churches, 292-300
 Dedications, 292, 294, 295
 All Hallows, Gracechurch street, 300
 St. Alban, 294, 296
 St. Alphage, 298
 St. Augustine (St. Paul's), 292
 St. Botolph, Aldgate, 299
 St. Botolph, Billingsgate, 299
 St. Botolph, Bishopsgate, 299
 St. Edmund, 299
 St. Ethelburga, Bishopsgate, 299
 St. Gregory (St. Paul's), 292
 St. Helen, Bishopsgate, 299
 St. Martin, 294
 St. Michael, Cornhill, 300
 St. Mildred, 298
 St. Martin-le-Grand, 294
 St. Olave (Hart street), 299
 St. Olave (Silver street), 298
 St. Olave (Southwark), 299
 St. Pancras, 294
 St. Paul's cathedral, 291, 292, 296, 437, 438, 439, 445
 St. Peter's, Cornhill, 295, 296, 438, 439, 445
 St. Sith (Benet Shorehog), 298
 St. Swithin, 299
 Cornhill, 291, 292, 295, 300, 437, 438, 440
 Folk Moot, 437
 London, *continued* :—
 Leadenhall market, 291
 Ludgate Hill, 291, 437
 Mint, 389
 Museum, 235-7
 Roman, 291-7, 300, 301, 437, 438, 440, 443-5
 Recent discoveries, 351
 Sketch-plan, 293
 Street plan, 292, 440, 444
 Royal palace, 437
 Saxon, 290-302, 437-42
 Walbrook, 291, 298, 299, 301, 437, 438
 Watling Street, 292
 Longevity of the Greeks, 366
 Long Meg, Cumberland (*illus.*), 328-9
 Long Wittenham, stockade, 434
 Lorimer, H. L., 58
 Love songs, Egyptian, 241
 Lowbury Hill, Berks, 435
 Lo-yang, jade, 104, 105, 229
 Lucania, excavations, 468
 LUCAS, A. ; Ancient glass, 94-5
 Lucius, 295, 296, 439
 Luyyan language, 454, 455

 McCown, T. D., 146, 150
 MACDONALD, SIR GEORGE, 102
 Rome in the Middle East (*illus.*), 373-80
 Magic of Columba, 168-75
 Maiden Castle, 348, 469
 Malta, cart-ruts, 339-42
 Malta (Siberia), excavations, 228-9
 Man, descent from apes, 223-4
 East Africa, 95-7
 Paleolithic, 354, 355
 Skeleton of neolithic, 491-2
 Skeletons, 475
 Manuscripts, early ornament in, 51, 52
 Maps :—
 Bexley Dyke, 219
 Domesday settlement, Fenland, 189
 Fenland, 187
 Kenya : Uasin Gishu plateau, 433
 London, churches, etc., of Saxon, 292, 294, 295, 298, 299
 Margam mountain, 397, *and facing* p. 398
 Ordnance Survey, 428

INDEX

Maps, *continued* :—

- Use to illustrate archaeology and history, 8-10, 15
- See also* DISTRIBUTION-MAPS ; PLANS
- Mapungubwe, excavations, 103
- Marathon, battle, 176-8
- Margam mountain, Glamorgan, forts and farms (*illus.*), 395-413
- Marigold pattern (*illus.*), 48, 49, 50, 52
- Martin (Saint), dedication, 294
- MATTINGLY, HAROLD ; Britannia, 381-94
- Maughold, 49
- Meare Lake village, 469
- Medicine man, Sierra Leone (*illus.*), 337, 338
- Megaliths :—
 - Guernsey, 474-5
 - Hannover, 419
 - Largalinn, 330
 - Ordnance Survey maps, 124, 428
 - Salisbury Plain, 428
 - Sumatra, 107, 481
- Mentz (Professor), 464
- Mercia, 186, 194, 195, 196, 197, 199
- Mes-kalam-dug, 450, 451
- Mesolithic culture, 108
 - Palestine, 135, 138
 - Site, Broxbourne, 474
- Mesopotamia, archaeology, 455-6
 - Pictographic scripts, 467
 - Roman province, 375
- MESTON, A. L. ; Aboriginal rock-carvings in Tasmania (*illus.*), 179-84
- Michelsberg culture, 31, 32, 33, 38, 40, 41
- Micoquian horizon, 147, 148
- Miers, Sir Henry, report on museums, 425-7
- Mildred (Saint), dedication, 298
- Milne, H. J. M., 465
- Minoan chronology, 363-5
- Minturnae, excavations, 241-3
- Miracles of Columba, 169-71, 174-5
- Mirror symbol, 45
- Missale Gothicum (*illus.*), 52
- Mohenjo-Daro script, 252-4
- Monsters in rivers, 85-6, 468
- Montgomeryshire, Roman occupation, 109
- Montmoret, 27, 31
- Monuments, *see* ANCIENT MONUMENTS
- Morals, Egypt, 476-8

- Mososaurs, 468
- Mousterian, animal remains, 144, 146
 - Industry, Palestine (*illus.*), 142, 144-9
- Mullaghmast, 48
- Müller, Valentin, 152, 163
- Mummy wheat, 470
- Museum Acts, 426
 - Association, 426
 - Organization and equipment, 425-8
- Mycenae, 110-12
- MYRES, J. L., 10
 - Simonides, Aeschylus, and the battle of Marathon, 176-8
- MYRES, J. N. L. ; Some thoughts on the Topography of Saxon London, 437-42
 - Reply by R. E. M. Wheeler, 443-7
- Nasian (Nesian) language, 454, 455
- Natan leod, British king, 46
- National parks, 349
- Natufian, animal remains, 138
 - Industry (*illus.*), 135-9
- Necropolis, *see* CEMETERY
- Neolithic culture, diffusion, 24 ff
 - Houses, Denmark (*illus.*), 206-7
 - Man, 491-2
 - Period, Western Europe, 24-42
 - Pit-dwelling, 473
 - Settlement, Erimi (Cyprus), 86-9
- Netley, 46
- Neuchâtel, pottery (*illus.*), 27, 28, 38, 39, 40
- Neuville, René, 133, 136, 138, 149
- New Grange, 415
- Newry, 48, 49
- Nile Valley, prehistoric survey, 354-6
- Nine huntings, 73-80
- Nineveh, excavations, 108
- Nomori, Sierra Leone (*illus.*), 336-8
- Norfolk, earldom, 197
 - Woodland, 214
- Norrie's Law, plaque (*illus.*), 44, 45
- Northallerton, cross, 55
- Northumbria, 186
 - Anglian art, 55-57
 - Place-names, 98-101
- Norway, agriculture, 237-9
 - Glacial period, 366-7
- NOTES AND NEWS, 85, 202, 328, 453

ANTIQUITY

- Oakley Down, battle, 339
 Odenathus (Prince), 376
 Offa (King), 294, 296
 Offa's Dyke, 20-22, 446
 Öland, 486-7
 Olave, king of Norway, 298
 Oldoway site, 96
 Omalian culture, Belgium, 26, 31
 Oman, Sir Charles, 19
 O'Neil, B. H. St. J., 471
 Ordnance Survey, 421-2, 474
 Air-photographs, 422
 Archaeological publications, 428
 Archaeology officer, 422
 Map of barrows, Trent Basin, 124
 Original one-inch survey (*illus.*), 422
 Period maps, 422
 Orosia (Saint), 281-9
 Oslo, 118
 Ostraka, Tell Duweir (Palestine), 352
 Oswald, king of Northumbria, 171, 172
 Oswiu, king of Northumbria, 202, 203
 Osyth (Saint), 298
 Ox-yoking (*illus.*), 456-9

 Paganism, Anglo-Saxon, 474
 Page, William, 301, 438
 Palaeolithic industries, Palestine (*illus.*), 133-50
 Palaic language, 454
 Palestine :—
 Excavations, Wady al-Mughara, 475
 Stone Age (*illus.*), 133-50
 Palmyra, 375
 Roman rule, 376-7
 Pancras (Saint), 294
 Papyrus, Egyptian, 240-1
 Fayum, 347
 Patagonia, glaciation, 245-6
 Patroklos, cremation of, 58, 59
 Pausanias, 151, 161, 164, 165
 Peake, Harold, 9, 11
 Pearls, British, 342-4, 384
 PEATE, IORWERTH, 407
 The nine huntings, 73-80
 Peers, Sir C. R., 420
 Pekin skull, 96
 Penda of Mercia, 195

 Pennersaugh, 338, 339
 Pennocrucion, Gaelic equivalent, 350
 Penresax, 338
 Pensax, 339
 Persepolis, inscriptions, 97
 Sculptures, 228
 Peru, Institute of Archaeology, 349, 350
 Peterborough ware, 25, 37, 38, 41, 195, 200
 Petrie, Sir Flinders, 149, 224
 Peu Richard, 36
 Phillips, C. W., 470
 D. W., 16
 Pictish symbols (*illus.*), 44-7
 Piggott, Stuart, 24 ff
 Pilgrim's Way, 17
 Piltdown skull, 96, 97
 Pitt-Rivers, Augustus Henry, 7, 8, 19, 414, 415, 420, 424
 Place-name Society, 467-8
 Place-names, Northumbria, 98-101
 Middle Welsh, 203
 Plaitford (Hants), barrow, 101
 Plans :—
 Cattle enclosures, 435
 Country-houses, Italy, 266-7, 270-1, 274-5
 Roman London, 293
 Verulamium, 293
 Plough, Cornish (*illus.*), 204
 Pompeii, eruption of Vesuvius (*illus.*), 330-2
 Houses (*illus.*), 263-79
 Pond barrows, 459-61
 Portland stone, 18
 Postumus, governor of Gaul, 388, 389
 Potamia (Cyprus), sculptures (*illus.*), 89
 Pottery *d cannelure* (*illus.*), 32, 33, 36, 37
 Arpachiyah, 225
 Erimi, Cyprus (*illus.*), 87, 88
 Neolithic and Chalcolithic periods (*illus.*), 24-42
 Western culture, chronology, 41
 Windmill Hill ware, 24 ff, 215
 Praxiteles, 151, 155, 160, 161, 164, 165, 166, 167
 Prehistoric archaeology, Northern Ireland, 329-30
 Britain, bibliography, 472
 Remains, Cumberland, Westmorland and Lancashire, 361-3

INDEX

- Prescelly Hills, 19
 Prorok, Count Byron de, 2
 Pytheas of Marseilles, 383

 Quaternary glaciation, 106, 243-6
 Period, exhibitions, 102

 Race and culture, 90-3, 106
 Rameses II, cartouche (*illus.*), 205
 RANDALL, H. J.; History in the open air,
 5-23
 Ras Shamra, gold vessels, 228
 Cuneiform script, 453
 Reaney, Dr, 468
 Recent articles, 106, 472
 Recent events, 102, 223, 348, 467
 Reculver, monastery, 202
 Reinerth, Hans, 27, 31
 Reviews, 110, 231, 353, 476 *and see* p. 510
 Richter, G. M. A., 152, 157, 158, 159, 160,
 161, 162, 163
 Ridge ways, 17
 Riss-Würm, Palestine, 148, 150
 Roads, 16, 17
 Yucatan, 103
 Rock-carvings, Tasmania (*illus.*), 179-84,
 463-4
 'Uweinat (*illus.*), 67-71
 Paintings, Sahara, 352
 Yerguehda Hill, 71
 Roman :—
 Amphitheatre, Sarmisegetusa, 469
 Bridge, Alfoldean, 351
 Cattle enclosure, Lowbury Hill (*illus.*), 435
 Church, Silchester, 296
 Coins depicting Britannia (*illus.*), 392-4
 Falkirk hoard, 102, 103
 Sharaoh hoard, 472
 Empire, 315-27, 373-80
 Fort, Caersws, 109
 Mines, gems found, 462-3
 Occupation, Montgomeryshire, 109
 Settlement, Bloxham, 229-30
 Villa, Langton, 243
 Wall, 119-20, 418
 Yokes (*illus.*), 456, 457
 Rome, economic survey, 113-14
 Roundwood (Hants), burial mound, 101

 Roy (General), 5, 421, 422
 Royston, Mile ditches (*illus.*), 216-18
 Ruisseau site, 34
 Rurik (Prince), 312
 Russia, archaeological work, 461-2
 Architecture, 368

 Sabun, sultan of Wadai, 64
 Sacrifice, human, 59, 225, 332-5, 450-1
 St. Abb's Head (*illus.*), 129
 Fort, 202
 Monastery, 202
 Salisbury Plain, air-photographs, 422
 Earthworks, 231-3
 Megalithic survey, 428
 Stockade, 434
 Salmonsbury camp, 351-2
 Salvian, 315-27
 Sarcophagus, Old Cairo (*illus.*), 205-6
 Sarmento, Martins, 485-6
 Sarmisegetusa, amphitheatre, 469
 SAWYER, E. H.; Cartouche of Rameses II,
 and sarcophagus of priest (*illus.*),
 205-6
 Saxon art (*illus.*), 43-57
 Cemeteries, 441
 London, 290-302
 Paganism, 474
 Saxons (West), 473
 Schliz, A., 9
 Scripts :—
 Egyptian Hieratic, 352
 Hittite, 453-5
 Indus Valley, 252-4
 Mesopotamian, 467
 Sculpture :—
 Greek, 233-5, 246-7
 Hermes of Olympia (*illus.*), 151-67
 Khafaje, 351
 Mullaghmast, 48
 Persepolis, 228
 South Kyme (*illus.*), 53, 54
 Tell Asmar, 351
 Votive statue, Cyprus (*illus.*), 89
 Septimius Severus, 388
 Sexwulf (Bishop), 199
 Shaft-graves, 'Atlit, 107
 Shapur, 376

ANTIQUITY

- SHAW, W. B. K. ; The mountain of
 'Uweinat (*illus.*), 63-72
 Shehaymah, 64, 65
 Sheep-rearing, Sussex, 472
 Shorthand, Greek, 464-5
 Shub-ad, 450, 452
 Sidonius, 81-4
 Sierra Leone, Nomori (*illus.*), 336-8
 Silchester, Roman church, 296
 Simonides, epigrams, 176-8
 Sineus (Prince), 312
 Skulls, Anglo-Saxon, 106
 Smith, Sidney, 455
 Snijders, G. A. S., 163
 SOM culture (*illus.*), 38, 39, 40, 41
 South Kyme, carved stone (*illus.*), 53, 54
 Spalda tribe, 186, 195, 200
 Spalding, 200
 Spearheads, bronze, 237
 Spectacle symbol, 45
 SPEISER, E. A. ; Ur excavations, 448-52
 Stabiae, houses (*illus.*), 263-79
 Stefansson, Jon, 469
 Stele at Fahan (*illus.*), 50
 Stenton, F. M., 198
 Stobi, Greek textile factory, 348
 Stockades, cattle, 434
 Wooden, 434 n
 Stone Age, Ireland, 475
 Palestine (*illus.*), 133-50
 Tools, 95-6
 Circle, Little Salkeld (*illus.*), 328-9
 Figures, Sierra Leone (*illus.*), 336-8
 Stonehenge, 6, 10, 19, 415
 Stoup, Cordova (*illus.*), 50, 51
 Strabo, 382, 383
 Strip-ware, 35
 Stubbs, William, 6
 Stukeley, Anna, 230
 William, 5, 328, 329, 494
 Suffolk, earldom, 197
 Woodland, 214, 215
 Sumatra, megaliths, 107, 481
 Surrey, place-names, 468
 Sussex, barrows, 473
 Sheep-rearing, 472
 Sutton Common, Yorks, earthworks, 104
 Sweden, battle-axe culture, 120-2
 Sweordora tribe, 186, 195, 200, 201
 Switzerland, Western culture, 26-40
 Sword pommel (*illus.*), 54, 55
 Symbols, Pictish (*illus.*), 44-7
 Syria, Roman rule, 373-80
 Szentes, cemetery, 468
 Tabelbalat points, 142
 Tardenoisian culture, 25
 Tasmania, rock-carvings (*illus.*), 179-84
 Tayacian industry, Palestine, 148, 150
 Tell Asmar, excavations, 226-7
 Statuary, 351
 Temples :—
 Argive Hera, Lucania, 468
 Tell Asmar, 226
 Tepe Gawra, 475
 Templeneiery, 48
 Tepe Gawra, temple, 475
 Tiles, monastic, 472
 Terraces, Kenya, 211
 THOUVENOT (R.) ; Salvian and the Ruin of
 the Roman Empire, 315-27
 Threipland, P. Murray, 412
 Tidenham Chase, 22
 Tierra del Fuego, glaciation, 245-6
 Tin Hinan, tomb of, 474
 Titterstone Clee Hill camp, 473
 Tomb-slab, Clonmacnoise (*illus.*), 48, 49, 52
 Tombs :—
 Chiusi, 109
 Cyprus, 89
 Jericho, 108
 Old Loyang, Honan, 104, 105, 229
 Tin Hinan, 474
 Ur, 227, 451
 Tonbert, Gyrwan prince, 196, 200
 Towns, origins of medieval, 359-61
 Trackways, 16
 Transport, development, 16-19
 Treasure trove, 423-5
 Trepanning, 249-51
 Tribal hidage, 186, 190, 194, 195, 198
 Troldebjerg, neolithic houses (*illus.*), 206-7
 Trou du Loup (Aude) ware, 34
 Truvor (Prince), 312, 313, 314
 TUDEER, L. ; Isborsk—a Viking stronghold
 (*illus.*), 310-14

INDEX

- Tuna, boat-grave cemeteries, 487
 Turville-Petre, F., 133, 136, 138
 Tutshill, river crossing, 22
 Twmpath Diwlith, barrow, 396

 Uffington castle, stockade, 434
 White Horse, 230
 Ur, cemeteries, 448-52
 Date of tombs, 227, 451
 Excavations, 227, 448-52
 Lectures on, 455
 Uruk, excavations, 467
 Utoqué, Lake Zurich, 38
 'Uweinat Mountain (*illus.*), 63-72

 Vaballath, 376
 Vaufrey, M., 140
 Vedomavi, place-name, 401
 Venta Icenorum, 10
 Verulamium, 292, 293 (*plan*), 300
 Vesuvius, eruption of (*illus.*), 261, 330-2
 Viking fort, Isborsk, 309-14
 Invasions, 473
 Settlement, Jarlshof, 471
 Visigoths of Spain, 485
 Vogt, Dr, 38
 Vouga, M., 26, 27
 Vouga culture, 31, 33, 41

 Wace, A. J. B., 166
 Waddy, Charis, 58
 Wady al-Mughara, Palestine, excavations,
 (*illus.*), 133-50, 475
 Wales, hunting customs, 73-80
 Wallop, place-name, 105
 Walthamstow, 489
 Wansdyke, 19
 Water-ways, 17, 18
 Waziristan, archaeology, 246
 Wells, Carveth, 3

 Wessely (Professor), 464, 465
 Western culture, 26-40
 Westenkeramik, 26, 41
 Westmorland, prehistoric remains, 361-3
 Wheat, 240
 Mummy, 470-1
 WHEELER, R. E. M., 11, 396, 400, 401, 455,
 469
 Mr Myres on Saxon London, 443-7
 Topography of Saxon London (*plans*),
 290-302
 Whitehawk camp, 474
 Whymper, R., 470
 Wigesta tribe, 186, 195, 200
 Wihtraed, king of Kent, 294
 Wilbury, stockade, 434
 Williams-Freeman, J. P., 9, 11
 Race and culture, 90-3
 Wiltshire, Colt Hoare's history, 6
 Pond barrows, 459-61
 Windmill Hill ware (*illus.*), 24, 25, 27, 28,
 31, 37, 38, 39, 41, 42, 215
 Wisbech, 200
 Woodhenge, 10
 Woodland, Domesday, 211-15
 Woolley, C. L., 129, 130, 227, 448, 455
 Wulphere, Mercian king, 199

 Yerguehda Hill, rock-paintings, 71; Stone
 platforms (*illus.*), 71, 72
 Yokes (*illus.*), 456-8
 Yorkshire, archaeology, 247-9
 YOUNG, G. M.; Pond barrows, 459-61
 Yucatan, roads, 103
 Yugoslavia, archaeology in, 475

 Zammit, Sir Themistocles, 339, 340, 342
 Zancani, Paola, 468
 Zanotti-Bianco, Umberto, 468
 Zenobia (Queen), 376, 377
 Zimmerman, E. H., 52

ANTIQUITY

Reviews and Short Notices

	PAGE
Åberg (N.) <i>Bronzezeitliche und Früheisenzeitliche Chronologie</i> - - - -	363
<i>Ancient Monuments and Historic Buildings</i> - - - -	490
Arne (T. J.) <i>Bootgräberfeld von Tuna in Alsike, Uppland</i> - - - -	487
Beazley (J. D.) and B. Ashmole. <i>Greek Sculpture and Painting</i> - - - -	246
Breasted (J. H.) <i>Dawn of Conscience</i> - - - -	476
Brehaut (E., trans.) <i>Cato the Censor on Farming</i> - - - -	479
Brøgger (A. W.) <i>Sigd, Ljå og Snidill av det Norske Jordbruks Ophav</i> - - - -	237
Bruce (J. C.) <i>Handbook to the Roman Wall</i> - - - -	119
Budden (C. W.) <i>English Gothic Churches</i> - - - -	125
Burkitt (M. C.) <i>Old Stone Age</i> - - - -	118
Buxton (D. R.) <i>Russian mediæval Architecture</i> - - - -	368
Caldenius (C. C.) <i>Glaciaciones Cuaternarias en la Patagonia y Tierra del Fuego</i> -	245
Cameron (J.) <i>Skeleton of British Neolithic Man</i> - - - -	491
Casson (S.) <i>Technique of Early Greek Sculpture</i> - - - -	233
<i>Celtic Earthworks of Salisbury Plain</i> - - - -	231
Collingwood (R. G.) <i>Prehistory of Cumberland, Westmorland, and Lancashire</i> -	361
Corder (P.) and J. L. Kirk. <i>Roman Villa at Langton</i> - - - -	243
Cox (Trenchard). <i>Renaissance in Europe</i> - - - -	483
Dawson (C.) <i>Enquiries into Religion and Culture</i> - - - -	479
Dawson (W. R., editor). <i>The Frazer Lectures</i> - - - -	487
Deglatigny (L.) <i>Documents et Notes Archéologiques</i> - - - -	123
Elgee (F. and H. W.) <i>Archæology of Yorkshire</i> - - - -	247
Ferssander (J.-E.) <i>Schwedische Bootaxtkultur und ihre Kontinental-Europäischen Voraussetzungen</i> - - - -	120
Fournier (P.-F.) <i>Ouvrages de pierre sèche des cultivateurs d'Auvergne</i> - - -	117
Frank (Tenney, editor). <i>Economic survey of Ancient Rome</i> - - - -	113
Gardiner (A. H.) <i>Library of A. Chester Beatty</i> - - - -	240
Grieg (S.) <i>Middelalderske byfund fra Bergen og Oslo</i> - - - -	118
Guiard (Émile). <i>Trépanation Crânienne chez les Néolithiques et chez les Primitifs modernes</i> - - - -	249
Hamilton (J. A.) <i>Byzantine Architecture and Decoration</i> - - - -	496
Hasebroek (J.) <i>Trade and Politics in Ancient Greece</i> - - - -	356
Hatley (A. R.) <i>Walthamstow Archaeology</i> - - - -	489
Henry (F.) <i>La Sculpture Irlandaise</i> - - - -	125
<i>Homenagem a Martins Sarmiento</i> - - - -	485
Hunter (G. R.) <i>Script of Harappa and Mohenjo-Daro</i> - - - -	252
<i>Iraq : Journal of the British School of Archaeology, Iraq</i> - - - -	489
Johnson (J.) <i>Excavations at Minturnæ</i> - - - -	241
Jolliffe (J. E. A.) <i>Pre-feudal England : the Jutes</i> - - - -	493
Jones (C. H.) <i>Ancient Architecture</i> - - - -	490
Laidlaw (W. A.) <i>History of Delos</i> - - - -	483
Legrain (L.) <i>Luristan Bronzes</i> - - - -	361
<i>London Museum Catalogues : Costume</i> - - - -	235

INDEX

	PAGE
<i>Map of the Trent Basin</i> - - - - -	124
<i>Mémoires de la Délégation Française en Afghanistan</i> - - - - -	359
Meritt (B. D.) <i>Athenian Financial Documents</i> - - - - -	122
<i>Museum Journal</i> - - - - -	251
Nilsson (E.) <i>Quaternary Glaciations and Pluvial Lakes in British East Africa</i> -	243
Nilsson (M. P.) <i>Homer and Mycenae</i> - - - - -	110
Nordhagen (R.) <i>De Senkvartaere Klimavekslinger i Nordeuropa og Deres Betydning for Kulturforskning</i> - - - - -	366
Percival (John). <i>Wheat in Great Britain</i> - - - - -	240
Poidebard (A.) <i>La trace de Rome dans le désert de Syrie</i> - - - - -	373
Porteous (S. D.) <i>Psychology of a Primitive People</i> - - - - -	114
Power (P.) <i>Crichad an Chaoilli</i> - - - - -	126
Pradenne (Vayson de). <i>La Préhistoire</i> - - - - -	484
Richardson (B. E.) <i>Old age among the Ancient Greeks</i> - - - - -	365
Robinson (C. E.) <i>History of the Roman Republic</i> - - - - -	251
<i>Royal Commission on Historical Monuments : Herefordshire</i> - - - - -	353
— <i>Fife, Kinross and Clackmannan</i> - - - - -	495
Sandford (K. S.) and W. J. Arkell. <i>Paleolithic Man and the Nile Valley</i> - -	354
Sayce (R. U.) <i>Primitive Arts and Crafts</i> - - - - -	118
Stein (Sir Aurel). <i>Archaeological tour in Waziristan and Northern Baluchistan</i> -	246
Stenberger (M.) <i>Öland under Äldre järnåldern</i> - - - - -	486
Stephenson (C.) <i>Borough and Town in England</i> - - - - -	359
Stevens (C. E.) <i>Sidonius Apollinaris and his Age</i> - - - - -	81
Van der Hoop (A. N. J. Th. à Th.) <i>Megalithic remains in South Sumatra</i> -	481
Walters (H. B.). <i>English Antiquaries</i> - - - - -	494
Woolley (C. L.) <i>Ur Excavations</i> - - - - -	448
Zeiss (Hans). <i>Die Grabfunde aus dem Spanischen Westgotenreich</i> - - -	484

CORRIGENDA, VOLUME VIII

page 184, plates I-IV. The rock-carvings illustrated should have been described as
in TASMANIA

- „ 204, line 14, *for Cleeve read Sleeve*
- „ 254, see NOTE at foot of page
- „ 319, line 28, *for henchforth read henceforth*
- „ 334, „ 30, „ *untirely read entirely*
- „ 338, „ 19, „ *Burnswork read Burnswark*

Antiquity

A QUARTERLY REVIEW OF ARCHÆOLOGY



Edited by O. G. S. Crawford, F.S.A.

MARCH 1934

	Page
Editorial Notes	I
History in the Open Air. By H. J. RANDALL	5
Aspects of the Neolithic and Chalcolithic Periods in Western Europe. By JACQUETTA HAWKES	24
Notes on the Origins of Hiberno-Saxon Art. By A. W. CLAPHAM	43
A Scandinavian Cremation-Ceremony. Translated by CHARIS WADDY, with Note by H. L. LORIMER	58
The Mountain of 'Uweinat. By W. B. K. SHAW	63
The Nine Huntings. By IORWERTH C. PEATE	73
Sidonius and His Times. By THE EDITOR	81
Notes and News :—	
The 'Aquatile Beast' of Ness, 85 ; Cyprus Museum Excavations (2 plates), 86 ; Race and Culture, 90 ; The Hanging Bowl in Irish Literature, 93 ; Ancient Glass, 94 ; Early Man in East Africa, 95 ; Persepolis, 97 ; The Anonymous Life of St. Cuthbert, 97 ; Cremation-ceremony, 101	
Recent Events	102
Recent Articles	106
Reviews (<i>for list see overleaf</i>)	110

REVIEWS

	Page
<i>Homer and Mycenae.</i> By Martin P. Nilsson	110
<i>Economic Survey of Ancient Rome.</i> Edited by Tenney Frank	113
<i>Psychology of a Primitive People.</i> By S. D. Porteous	114
<i>Ouvrages de Pierre Sèche des Cultivateurs d'Auvergne et la prétendue découverte d'une Ville aux Côtes de Clermont.</i> By P.-F. Fournier	117
<i>Middelalderske Byfund fra Bergen og Oslo.</i> By Sigurd Grieg	118
<i>The Old Stone Age.</i> By M. C. Burkitt	118
<i>Primitive Arts and Crafts.</i> By R. U. Sayce	118
<i>Handbook to the Roman Wall.</i> By J. C. Bruce. Edited by R. G. Collingwood	120
<i>Die Schwedische Bootaxtkultur und ihre Kontinental Europäischen Voraussetzungen.</i> By J.-E. Forssander	120
<i>Athenian Financial Documents.</i> By B. D. Meritt	122
<i>Documents et Notes Archéologiques.</i> By Louis Degligney	123
<i>Map of the Trent Basin (Ordnance Survey)</i>	124
<i>English Gothic Churches.</i> By Charles W. Budden	125
<i>La Sculpture Irlandaise pendant les douze premiers siècles de l'Ère Chrétienne.</i> By Françoise Henry	125
<i>Irish Historical Documents.</i> Edited by Patrick Power	126

EDITORIAL NOTICES

ANTIQUITY is published quarterly on the 1st of March, June, September, and December.

THE ANNUAL SUBSCRIPTION (including postage) is ONE POUND sterling. It is payable in advance to the ASSISTANT EDITOR, 24 Parkend Road, Gloucester, England.

SINGLE COPIES may be obtained through any bookseller for 5s. 6d., which includes postage.

Trade orders should be addressed to the printer, John Bellows, Gloucester, England.

MSS (whether in the form of Articles or Notes) offered for publication should be sent to the EDITOR, O. G. S. CRAWFORD, Nursling, Southampton, England, and a stamped addressed envelope enclosed. All MSS must be typewritten. Payment is made for Articles only. The EDITOR is not responsible for the opinions expressed by contributors.

ADVERTISEMENTS, and all communications relating to them, to be sent to the ASSISTANT EDITOR, and BOOKS for REVIEW should be addressed to the EDITOR.

CLOTH CASES (lettered back and side) for binding Volume VII (nos. 25-28) can be obtained from John Bellows, Gloucester, England, 4s. post free, or if the numbers are sent to him (post paid) the inclusive charge for case and binding will be 7s. 6d. Remittance must accompany the order.

Antiquity

A QUARTERLY REVIEW OF ARCHÆOLOGY



Edited by O. G. S. Crawford, F.S.A.

JUNE 1934

	Page
Editorial Notes	129
The Stone Age of Palestine. By DOROTHY A. E. GARROD	133
The Problem of the Hermes of Olympia. By W. L. CUTTLE	151
The Magic of Columba. By O. G. S. CRAWFORD	168
Simonides, Aeschylus, and the Battle of Marathon. By J. L. MYRES	176
Aboriginal Rock-Carvings in Tasmania. By A. L. MESTON	179
The Fenland Frontier in Anglo-Saxon England. By H. C. DARBY	185
Notes and News :—	
Coludes burh, 202 ; An old Cornish Plough, 204 ; Two fragments, 205 ; Neolithic Houses, Denmark, 206 ; History Films, 207 ; Currency-Bars, 210 ; Terraces in Kenya, 211 ; Domesday Woodland in East Anglia, 211 ; A Flint-miner's dwelling and a Bronze Age farm in Sussex, 215 ; Mile Ditches at Royston, 216 ; Dyke near Bexley, Kent, 218	
Recent Events	223
Reviews (<i>for list see overleaf</i>)	231
Books Received	255

REVIEWS

	Page
<i>Celtic Earthworks of Salisbury Plain</i> - - - - -	231
<i>Technique of Early Greek Sculptor.</i> By Stanley Casson - - - - -	233
<i>London Museum Catalogues : No. 5, Costume</i> - - - - -	235
<i>Sigd, Lja og Snidill av det Norske Jordbruks Ophav.</i> By A. W. Brøgger - - - - -	237
<i>Wheat in Great Britain.</i> By John Percival - - - - -	240
<i>The Library of A. Chester Beatty.</i> By Alan H. Gardiner - - - - -	240
<i>Excavations at Minturnae.</i> By Jotham Johnson - - - - -	241
<i>Roman Villa at Langton, near Malton.</i> By P. Corder and J. L. Kirk - - - - -	243
<i>Quaternary Glaciations and Pluvial Lakes in British East Africa.</i> By Erik Nilsson - - - - -	243
<i>Las Glaciaciones Cuaternarias en la Patagonia y Tierra del Fuego.</i> By C. C. Caldenius - - - - -	245
<i>Memoir of the Archaeological Survey of India</i> - - - - -	246
<i>Greek Sculpture and Painting.</i> By J. D. Beazley and Bernard Ashmole - - - - -	246
<i>The Archaeology of Yorkshire.</i> By F. and H. W. Elgee - - - - -	247
<i>La Trépanation Cranienne chez les Néolithiques et chez les Primitifs modernes.</i> By Émile Guiard - - - - -	249
<i>History of the Roman Republic.</i> By Cyril E. Robinson - - - - -	251
<i>The Museum Journal</i> - - - - -	251
<i>Script of Harappa and Mohenjo-daro.</i> By G. R. Hunter - - - - -	252

Books Received - - - - -	255

EDITORIAL NOTICES

ANTIQUITY is published quarterly on the 1st of March, June, September, and December.

THE ANNUAL SUBSCRIPTION (including postage) is ONE POUND sterling. It is payable in advance to the ASSISTANT EDITOR, 24 Parkend Road, Gloucester, England.

SINGLE COPIES may be obtained through any bookseller for 5s. 6d., which includes postage.

Trade orders should be addressed to 24 Parkend Road, Gloucester.

MSS (whether in the form of Articles or Notes) offered for publication should be sent to the EDITOR, O. G. S. CRAWFORD, Nursling, Southampton, England, and a stamped addressed envelope enclosed. All MSS must be typewritten. Payment is made for Articles only.

The EDITOR is not responsible for the opinions expressed by contributors.

ADVERTISEMENTS, and all communications relating to them, to be sent to the ASSISTANT EDITOR, and BOOKS for REVIEW should be addressed to the EDITOR.

CLOTH CASES (lettered back and side) for binding Volume VII (nos. 25-28) can be obtained from John Bellows, Gloucester, England, 4s. post free, or if the numbers are sent to him (post paid) the inclusive charge for case and binding will be 7s. 6d. Remittance must accompany the order.

Antiquity

A QUARTERLY REVIEW OF ARCHÆOLOGY



Edited by O. G. S. Crawford, F.S.A.

SEPTEMBER 1934

	Page
Editorial Notes	257
Some Ancient Italian Country-Houses. By R. C. CARRINGTON	261
Santa Orosia : a Thaumaturgic Saint. By VIOLET ALFORD	281
The Topography of Saxon London. By R. E. M. WHEELER	290
Some Observations on Recent Geological Movements of the British Coastline. By O. T. JONES	303
Isborsk—a Viking Stronghold. By L. TUDEER	310
Salvian and the Ruin of the Roman Empire. By RAYMOND THOUVENOT	315
Notes and News :—	
Long Meg (2 plates), 328 ; Prehistoric Archaeology in Northern Ireland, 329 ; Eruption of Vesuvius, A.D. 79 (2 plates), 330 ; Human Sacrifice in Antiquity, 332 ; Currency-Bars, 336 ; Nomori of Sierra Leone (3 plates), 336 ; Battle of Brunanburh, 338 ; Maltese Cart-ruts, 339 ; British Pearls, 342 ; West Kennet Avenue (plate), 344 ; Fayum Papyri, 347	
Recent Events	348
Reviews (<i>for list see overleaf</i>)	353

REVIEWS

	Page
<i>Royal Commission on Historical Monuments, England : East Herefordshire</i> - - -	353
<i>Paleolithic Man and the Nile Valley in Nubia and Upper Egypt.</i> By K. S. Sandford and W. J. Arkell - - - - -	354
<i>Trade and Politics in Ancient Greece.</i> By Johannes Hasebroek - - - - -	356
<i>Mémoires de la Délégation Française en Afghanistan</i> - - - - -	359
<i>Borough and Town.</i> By Carl Stephenson - - - - -	359
<i>Luristan Bronzes in the University [of Pennsylvania] Museum.</i> By L. Legrain - -	361
<i>Prehistory of Cumberland, Westmorland and Lancashire north of the Sands.</i> By R. G. Collingwood - - - - -	361
<i>Bronzezeitliche und Früheisenzeitliche Chronologie.</i> By Nils Åberg - - - -	363
<i>Old Age among the Ancient Greeks.</i> By B. E. Richardson - - - - -	365
<i>De Senkvartaere Klimavekslinger i Nordeuropa og Deres Betydning for Kulturforskning.</i> By Rolf Nordhagen - - - - -	366
<i>Russian Medieval Architecture.</i> By D. R. Buxton - - - - -	368

EDITORIAL NOTICES

ANTIQUITY is published quarterly on the 1st of March, June, September, and December.

THE ANNUAL SUBSCRIPTION (including postage) is ONE POUND sterling. It is payable in advance to the ASSISTANT EDITOR, 24 Parkend Road, Gloucester, England.

SINGLE COPIES may be obtained through any bookseller for 5s. 6d., which includes postage.

Trade orders should be addressed to 24 Parkend Road, Gloucester.

MSS (whether in the form of Articles or Notes) offered for publication should be sent to the EDITOR, O. G. S. CRAWFORD, Nursling, Southampton, England, and a stamped addressed envelope enclosed. All MSS must be typewritten. Payment is made for Articles only. The EDITOR is not responsible for the opinions expressed by contributors.

ADVERTISEMENTS, and all communications relating to them, to be sent to the ASSISTANT EDITOR, and BOOKS for REVIEW should be addressed to the EDITOR.

CLOTH CASES (lettered back and side) for binding Volume VII (nos. 25-28) can be obtained from John Bellows, Gloucester, England, 4s. post free, or if the numbers are sent to him (post paid) the inclusive charge for case and binding will be 7s. 6d. Remittance must accompany the order.

Antiquity

A QUARTERLY REVIEW OF ARCHÆOLOGY



Edited by O. G. S. Crawford, F.S.A.

DECEMBER 1934

	Page
Editorial Notes	369
Rome in the Middle East. By Sir GEORGE MACDONALD	373
Britannia. By HAROLD MATTINGLY	381
Forts and Farms on Margam Mountain, Glamorgan. By CYRIL and AILEEN FOX	395
Archaeology and the State. By GRAHAME CLARK	414
Defences against Cattle-Raiding. By G. W. B. HUNTINGFORD	429
Some Thoughts on the Topography of Saxon London. By J. N. L. MYRES	437
Mr Myres on Saxon London : a reply. By R. E. MORTIMER WHEELER	443
Ur Excavations : a review. By E. A. SPEISER	448
Notes and News :—	
Hittite Scripts, 453 ; Mesopotamian Archaeology, 455 ; Prehistoric Ox-yoking, 456 ; Pond Barrows, 459 ; Archaeological Work in the U.S.S.R., 461 ; Mines and Gems, 462 ; Rock Sculptures (2 plates), 463 ; Greek Shorthand, 464 ; History Films, 465.	
Recent Events	467
Recent Books and Articles	472
Reviews (<i>for list see overleaf</i>)	476
Title-page, Contents, and Index to Volume VIII	

REVIEWS

	Page
<i>The Dawn of Conscience.</i> By J. H. Breasted - - - - -	476
<i>Cato the Censor on Farming.</i> Translated by E. Brehaut - - - - -	479
<i>Enquiries into Religion and Culture.</i> By Christopher Dawson - - - - -	479
<i>Megalithic Remains in South Sumatra.</i> By A. N. J. Th. à Th. Van der Hoop - - - - -	481
<i>A History of Delos.</i> By W. A. Laidlaw - - - - -	483
<i>The Renaissance in Europe.</i> By Trenchard Cox - - - - -	483
<i>La Préhistoire.</i> By Vayson de Pradenne - - - - -	484
<i>Die Grabfunde aus dem Spanischen Westgotenreich.</i> By Hans Zeiss - - - - -	484
<i>Homenagem a Martins Sarmiento</i> - - - - -	485
<i>Öland under Äldre Järnåldern.</i> By Márten Stenberger - - - - -	486
<i>Das Bootgräberfeld von Tuna in Alsike, Uppland.</i> By T. J. Arne - - - - -	487
<i>The Frazer Lectures</i> - - - - -	487
<i>Iraq : journal of the British School of Archaeology in Iraq</i> - - - - -	489
<i>Walthamstow Archaeology.</i> By Annie R. Hatley - - - - -	490
<i>Ancient Monuments and Historic Buildings</i> - - - - -	490
<i>Ancient Architecture.</i> By Chester H. Jones - - - - -	490
<i>The Skeleton of British Neolithic Man.</i> By John Cameron - - - - -	491
<i>Pre-Feudal England : the Jutes.</i> By J. E. A. Jolliffe - - - - -	493
<i>The English Antiquaries.</i> By H. B. Walters - - - - -	494
<i>Royal Commission on Historical Monuments (Scotland) : Fife, Kinross, and Clackmannan</i> - - - - -	495
<i>Byzantine Architecture and Decoration.</i> By J. Arnott Hamilton - - - - -	496

EDITORIAL NOTICES

ANTIQUITY is published quarterly on the 1st of March, June, September, and December.

THE ANNUAL SUBSCRIPTION (including postage) is ONE POUND sterling. It is payable in advance to the ASSISTANT EDITOR, 24 Parkend Road, Gloucester, England.

SINGLE COPIES may be obtained through any bookseller for 5s. 6d., which includes postage.

Trade orders should be addressed to 24 Parkend Road, Gloucester.

MSS (whether in the form of Articles or Notes) offered for publication should be sent to the EDITOR, O. G. S. CRAWFORD, Nursling, Southampton, England, and a stamped addressed envelope enclosed. All MSS must be typewritten. Payment is made for Articles only.

The EDITOR is not responsible for the opinions expressed by contributors.

ADVERTISEMENTS, and all communications relating to them, to be sent to the ASSISTANT EDITOR, and BOOKS for REVIEW should be addressed to the EDITOR.

CLOTH CASES (lettered back and side) for binding Volume VIII (nos. 29-32) can be obtained from John Bellows, Gloucester, England, 4s. post free, or if the numbers are sent to him (post paid) the inclusive charge for case and binding will be 7s. 6d. Remittance must accompany the order.

By P. N. URE

ARYBALLOI & FIGURINES

FROM

RHITSONA IN BOEOTIA

An account of the early archaic pottery and of the figurines, archaic and classical, with supplementary lists of the finds of glass, beads, and metal, from excavations made by
R. M. BURROWS and P. N. URE
in 1907, 1908, 1909 and by
P. N. and A. D. URE
in 1921 and 1922

With 21 collotype plates and a map. 21s net.

CAMBRIDGE UNIVERSITY PRESS



ARCHAEOLOGICAL GUIDES. The small guides to remains of historic interest now in the custody of the Crown, prepared by the Chief Inspector of Ancient Monuments of H.M. Office of Works, are succinct and valuable monographs on material of great historical value. Recent issues include Richborough Castle, Skara Brae (Orkney), Tantallon, Portchester Castle, Tintern Abbey, Sweetheart Abbey, Kensington Palace, Richmond Castle. Illustrated. 6d each (7d). The 'List of Ancient Monuments of Great Britain', prepared by the Commissioners of Works, constitutes a Guide, county by county, to the important historical monuments and remains of the country. 1s 3d (1s 4d).

MEDIEVAL HISTORY. A new volume (xi) has been added to the series of Close Rolls for the reign of Henry III. It covers the years 1259-61 and the aftermath of the provisions of Oxford. The volume includes letters from the King in France, many references to the Welsh borders and to Jews in England. A wealth of other material relating to English history at this period is also to be found in the volume. 35s (35s 9d).

MAGNA CARTA. A facsimile reproduction of the original version of Magna Carta printed by the Ordnance Survey is still available for sale at the price of 1s 6d net. This price includes a translation prepared in the Public Record Office. (Post free, rolled, in cardboard tube) 1s 10d.

All prices are net. Those in brackets include postage.

HIS MAJESTY'S STATIONERY OFFICE

LONDON: Adastral House, Kingsway, W.C.2.

EDINBURGH 2: 120 George Street.

CARDIFF: 1 St. Andrew's Crescent.

MANCHESTER 1: York Street.

BELFAST: 80 Chichester Street.

Or through any Bookseller.

Ordnance Survey Maps

Period Maps:

NEOLITHIC WESSEX

A map on the 'Quarter-Inch' scale, showing the distribution of long barrows, habitation sites, flint mines.

With the folded edition is bound a descriptive schedule of sites and 15 pages of letterpress.

Price:—in cover, with letterpress, on paper 5s; on linen 5s 6d; dissected 6s 6d. Map only, paper flat 2s.

TRENT BASIN

This map is similar in style to 'Neolithic Wessex' and is the same price.

CELTIC EARTHWORKS OF SALISBURY PLAIN

This area will be covered by six sheets, of which the first, 'OLD SARUM', is now ready. This map, on the scale of 1:25,000, is based largely on Air Photographs and shows Celtic fields, linear earthworks and barrows. It is intended mainly for those interested in Field Archaeology.

Price:—in covers, on paper 2s 3d; on linen 3s; dissected 4s; on paper flat 1s 6d.

ROMAN BRITAIN

Scale:—1/M (1:1,000,000) showing Roman roads, towns, villages, potteries, mines, military sites (classified), milestones, villas and other large houses, etc. The physical basis shows relief by means of layer tints. With the folded edition is bound an index, chronological table, explanatory notes and bibliography.

Price:—in cover, with letterpress, on paper 4s; on linen 5s; dissected 6s 6d. Map only, paper flat 2s 6d.

XVII CENTURY ENGLAND

On the same scale and physical basis as 'Roman Britain'; roads based on Ogilby's Survey (1675); towns and ports classified in order of importance. With the folded edition is bound a map of London (circa 1660), a foreword by Prof. G. M. Trevelyan, a brief outline of the Civil War by Dr. J. E. Morris and a chronological table compiled by Dr. Charles Singer and Sir John Squire.

Price:—in cover with letterpress, on paper 5s; on linen 6s; dissected 7s 6d. Map only paper flat 2s 6d. Map of XVII Century London and environs, 1s.

For full particulars of these and other publications of the Ordnance Survey write (mentioning this announcement) to

The Director-General, Ordnance Survey Office, Southampton